Atheism Criticism and Evidence for the Validity of Islam Series (1)

ATHEISTS
The Thieves of the Hereafter

A Refutation of Atheists' Views about the Origin of Life and the Universe

Dr. Haitham Talaat

Translated by : Sabah Temmar B. A'mar

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In the name of Allah, the Gracious, the Merciful.

Verily, all praise is for Allah. We praise Him, seek His help, and ask His forgiveness. We seek refuge in Him from the evil within ourselves and from the wickedness of our deeds. Whomever is guided by Allah cannot be led astray, and whomever Allah misguides cannot be guided. I bear witness that there is no deity worthy of worship except Allah without partners and that Muhammad is His servant and Messenger. May Allah send blessings and peace upon Prophet Muhammad and upon his Family and Companions, and upon all His Prophets and Messengers and those who love them until the Day of Judgement.

To proceed:

Twelve years ago, I aspired to write an extensive book on the subject of atheism criticism and the evidence for the validity of Islam. Actually, I set a deadline to turn my idea into reality and this project, which was underway over the past years, was completed this year only. Hence, the book in your hands is the first book in the ‘‘Atheism Criticism and Evidence for Islam Series’’ which consists of three books. I present in *Thieves of the Hereafter* some of the signs of the existence of the Creator—glory be to Him—and I refute atheists' views about the origin of life and the emergence of the universe and living organisms. In *The Last Prophet*, the second book of this series, I will—God willing—dive into the origin of religion in general and the history of monotheism in particular, and I will highlight the proofs of the authenticity of Prophet Muhammad (PBUH), especially the prophecies about his advent in the Scriptures of the People of the Book (i.e. the Jews and the Christians). Finally, in *Atheistic Misconceptions and Insinuations*, the third book in this series which will be published in the coming months—God willing—I will refute the most famous allegations against Islam and Sharia law, and I will share guidelines on how to deal with creedal and faith suspicions and insinuations. I praise Allah for facilitating the completion of this project and I am grateful to everyone who taught me, may Allah reward them all.

I present this project to all the students of religious knowledge and all the seekers of truth be they Arabs or non-Arabs, Muslims or non-Muslims, believers or atheists, for indeed the arguments presented in these books are a discourse to everyone regardless of race and intellectual or religious orientation. The books of this series are written in a somewhat simple lanuguage, yet they require a careful reading of their concise paragraphs, for they are not a mere presentation of information, but an attempt to build consolidated knowledge. In fact, instead of

deconstructing each misconception on its own I laid the foundation for atheism criticism in order to enhance the reader's certainty of faith rather than indoctrinate him. I do not claim that what I have written is flawless, for this project is but one tiny step on a long road paved with thousands of arguments. Indeed, no one can comprehend the marvelous works and the wonders of God's Power and Wisdom or praise Him as He deserves to be praised. God says: Say: If the sea were to become ink to record the Words of my Lord, indeed the sea would be all used up before the Words of my Lord are exhausted, and it would be the same even if We were to bring an equal amount of ink. (The Qur'an 18:109) I presented the content of these books in a question-and-answer system in order to facilitate focused attention and information retrieval. In addition to the links (URLs) to the resources that I used, the books of this series contain also pictorial illustrations from the research sources so that my argumentation is well documented and readers can easily verify the authenticity and reliability of the data presented. Kindly remember me in your good supplications. I pray God the Most Generous to make this project beneficial and to reward us all.

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Now, let us start with the blessing of Allah:

1. What is the objective of this project and what audience is it targetted to?

The objective of this project is to establish a sound approach which will be the foundation for accurate knowledge just like roots give rise to branches. In other words, the seeker of truth will be guided by this approach in his search for arguments because where there is no such approach even if I cleared up ten misconceptions a skeptic would still be confused by the eleventh. Therefore, the Muslim youth will, thanks to this approach, acquire the faculty for refuting any suspicion by understanding the ‘‘mutashabih’’ (allegorical) in the light of the ‘‘muhkam’’ (established and decisive). They will also learn in which books to look for the refutation of a given misconception so that every misinterpretation gets eliminated and no seeds of doubt remain in the hearts of the truth seekers be they atheists or skeptics. Moreover, this project aims to train young Muslims, in every village, city and street, on how to adequately debunk the arguemts of atheists and refute their allegations by enhancing their understanding of the evidence for the validity of Islam and the certainties of faith as well as by acquainting them with the glaring flaws in the philosophies of secularism and materialism and the major problems with atheism.

Without a doubt, we are presently witnessing a global war against Islam in that there is a concerted effort to weaken and annihilate its societal system using military, economic, social and cultural means. In fact, such a war has been the fate of all the followers of the Prophets (PBUT) throughout the human history which records that the sects and doctrines of disbelief have always opposed the believers and tried to silence them using cunning schemes such as plying them with worldly temptations, spreading poisonous misconceptions to make disbelief alluring and fair seeming, as well as by subjecting them to abuse and persecution (even military colonization). In fact, the people of all nations adopted the same attitude against the invitation of the Prophets (PBUT) in different ages for thousands of years. In other words, rebellion and transgression were the common characteristic and the uniform attitude and behavior of the former and latter generations of disbelievers because all the ignorant people of every age have been desirous of living a life free of Allah’s service and fearless of His accountability. Therefore, they gave one and the same fixed answer to whoever called them to lead a God-conscious life. God says: Is this the legacy they have transmitted, one to another? Nay, they are themselves a people transgressing beyond bounds! (The Qur'an 51:53) This throws light on an important truth which

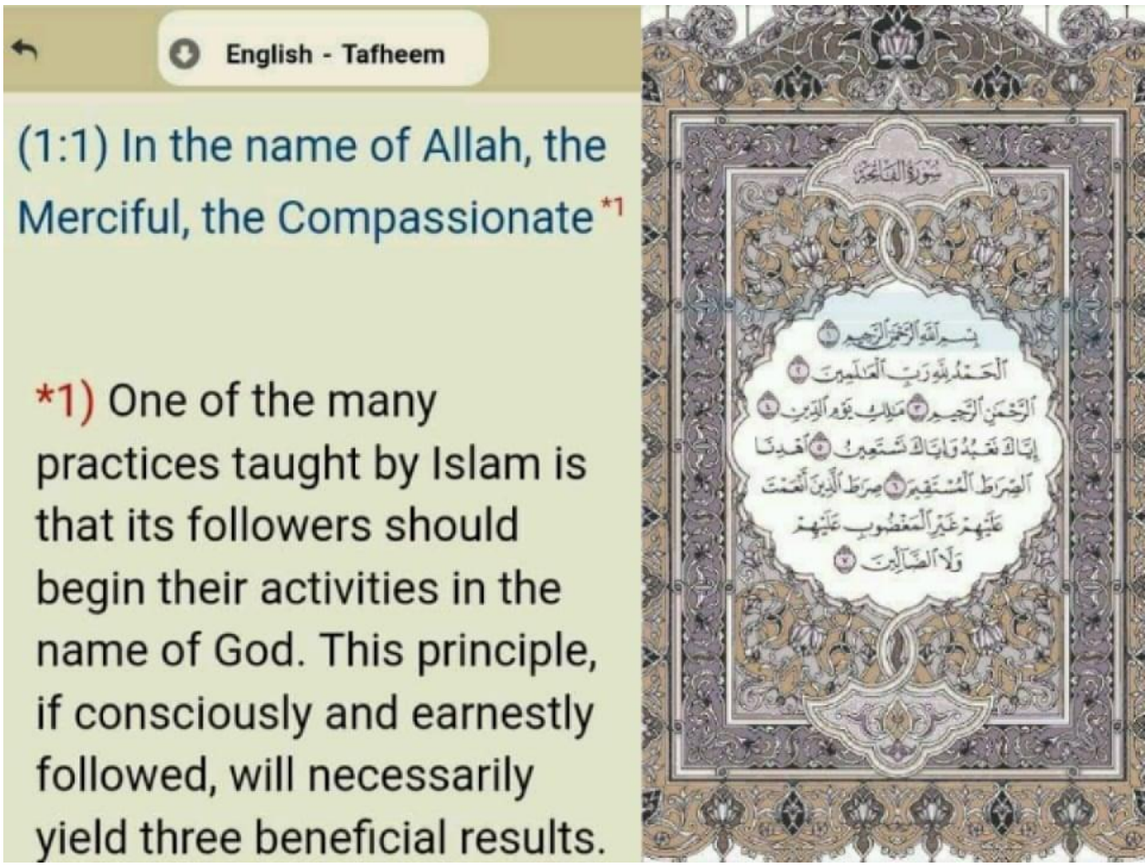
is that the atheists of today might heap up their arguments for atheism as they like, but their motives for following that creed are precisely the same as had been of the atheists six thousand years ago.

Indisputably, the world is currently witnessing a real phenomenon of atheism in that the numbers of atheists are on the rise across the world. In fact, this wave of atheism, led by the ‘‘thieves of the hereafter’’, who are robbing people of their after life reward, has reached the Islamic world as well. Therefore, it is every Muslim’s duty to learn how to face this wave and confront these thieves. We should also benefit from the advantages it carries, for in many ways this wave is a blessing in disguise. As Muslims, we should defend Islam and become callers for the truth under the banner of Prophet Mohamed (PBUH). Furthermore, we should constantly work on strengthening our certainty of faith and enhancing our understanding of the problems with atheism in order to learn how to invite atheists and skeptics to the Way of God on the basis of clear perception.

In fact, the Muslim minorities around the world are the most exposed to this wave of atheism, which is why I intend to translate the books of this series into other languages so that they, as well as all non-Muslims, can benefit from them. Assuredly, this is our duty because the the world needs us a lot at this critical juncture in human history. Incontestably, there is an unprecedented wave of nihlism and absurdism in the world wherein nihilists and absurdists are promoting the notion of ‘the non-man’ as a result of ‘the death of of Man’ which is a by-product of atheism. Indeed, wise are those who seek the help of God and do their best to call people to His way and spread His message. Verily, this is our real duty as Muslims, which will win us the highest place of honour. God says: And who is fairer in speech than he who calls to Allah and acts righteously and says: “I am a Muslim”? (The Qura'n 41:33)

2. What is the shortest way to gain certainty of faith for both Muslims and skeptics?

Doubtlessly, the greatest way to gain certinty is meditating in the verses of the Holy Qura'n on a daily basis even if it is just half a ‘hizb’ (i.e. five pages). Actually, pondering over the Qura'n and reflecting upon its meanings can be easier thanks to the books of Qura'n interpretation such as *At-tafseer Al-muyassar* which is brief and beautiful. Quite simply, you read a Quranic verse then read its interpretation. I also recommend *Al-mukhtassar fi At-tafseer* then *Tafseer As-sa'di*, may God have mercy upon him.


English - Tafheem
(1:1) In the name of Allah, the Merciful, the Compassionate *1
*1) One of the many practices taught by Islam is that its followers should begin their activities in the name of God. This principle, if consciously and earnestly followed, will necessarily yield three beneficial results.

Indeed, this journey of daily Qura'n reading has its spiritual secrets especially when done with contemplation of the meaninings, for it provides an answer to every question, clears up all misconceptions and eliminates all suspicions. Additionally, it brings peace to the soul and remedies the satanic whisperings. Most importantly, the more you ponder over the Qura'n the more you become aware of its eternal miraculous nature. Ironically enough, when the enemies of Allah's Messenger (PBUH), who tried to kill him, heard the Qura'n, their hearts were softened and faith sparkled in their eyes as they recognized the truth. Obviously, if the speech of God could have such wondrous power over those who hated Islam and fought against it, then it will certrainly affect the seekers of truth, let alone the Muslims, in even more amazing ways. Indeed, the Qur'an stimulates spiritual awakening and helps us to ascend to higher places in terms of faith as it expands the chest and opens it for guidance, and makes the heart rejoice with the gad tidings it abounds with. Therefore, the human the soul, once introduced to the realms of the Qura'n, will never get enough of it and will always yearn for more and more of it.[1]

Interstingly, the scholars who forsook the Qur'an and turned to 'ilm al-kalām and followed in the footsteps of the philosophers repented at the sunset of their years when they were

[1]Ibrahim As-Sakran, *At-tariq ila al-Qur'an (The Path to the Qura'n)*, (Riyadh: Markaz Al-fikr Al-Mu'asir, 2012).
https://www.noor-book.com/%D9%83%D8%AA%D8%A7%D8%A8-%D8%A7%D9%84%D8%B7%D8%B1%D9%8A%D9%82-%D8%A5%D9%84%D9%89-%D8%A7%D9%84%D9%82%D8%B1%D8%A2%D9%86-pdf.

left with nothing but grief and sorrow because they were exhausted by the philosophical methods. Therefore, they warned those who came after them against following the mistaken path that they trod. Ar-Razi (RA) regretted having induldged in 'ilm al-kalām: ‘‘I examined the various methods of 'ilm al-kalām (the philosophical discipline of seeking theological principles through dialectic) and the philosophical approaches. I realized that they have nothing to offer to one who is sick and they cannot quench a man's thirst (for knowledge). I came to the realization that the closest way is the way of the Qura'n.’’ He further said: ‘‘and whoever experiences what I experienced will evetually come to the same conclusion.’’[2] Similarly, Ash-shahrastani (RA) admitted after spending a long time studying with the philosophers and scholars of 'ilm al-kalām that he found nothing but confusion and regret: ‘‘all my life, I went around all the schools of philosophy, studying all of them. And I never saw anything but people resting their chins on their hands in utter uncertainty or gnashing their teeth in regret.’’[3] Accordingly, Abu Al-Ma'āli Al-Juwaini, one of the most prominent students of Islamic philosophy ('ilm al-kalām) may God have mercy upon him, confessed that had he known what it would do to him, he would not have studied it: ‘‘I have read books the number of which equals fifty thousand multiplied by fifty thousand. I threw myself into a vast ocean and forsook the people of Islam and their knowledge. I indulged in that which they had warned me against and here I am returning to the Truth with the one absolute truth.’’ When he was on his deathbed he said: ‘‘now if Allah does not shower me with His mercy, then woe to Ibn al-Juwayni. Here I am, dying on the 'aqeedah of my mother.’’ In short, they realized that the most that reason can achieve is a dead end and the ultimate result of people’s striving is misguidance, and that they have not gained anything from their lifelong search apart from a collection of what the philosophers said. Therefore, they returned from the doctrine of ‘al-kalām’ to that of ‘as-salaf’ (the way of the revelation as understood by the Prophet (PBUH) and the early generations of Muslims) which is the best, easiest and shortest way to gain certainty because it is the Word of God addressed to people of all intellectual capacities and cultural backgrounds.

Moreover, I invite you to contemplate the ḥadīths (sayings) of Prophet Mohamed (PBUH) for they are the second best source for knowledge after the Qur'an. I recommend reading 5 ḥadīths per day from the book *Riyadh As-Salihin* (The Gardens of the Righteous) along

[2]Shams Ad-din Adh-Dhahabi, *Siyar A'lam Al-Nubala' (The Lives of Noble Figures)*, (Beirut: Mu'assassat Ar-rissala, 1985), third edition, volume 21, p. 501.

[3]Tadj Ad-din Ash-shahrastani, *Nihayat al-aqdam fi 'ilm al-kalām (The End of Steps in the Science of Theology)*, (Beirut: Daar Al-Kutub Al-'Ilmiyyah, 2004), p.3.

with a beautiful and simple book of Sunnah explanation such as Ibn Al-'Uthaimin's *Sharh Riyadh As-Salihin*. It is worth mentioning that *Riyadh As-Salihin* deals with the subject of the purification of the soul (tazkiyyat an-nafs) which we desperately need. I urge you all to make today the first day of your journey to aquire certainty of faith, for this is the ultimate good, whereas all else that is not done in token of love and worship to Allah is vain and worthless. Ibn al-Qayyim said: ''a servant of Allah gets reward for praying but only for the part of his prayer performed with full attention (in which he is mindful of what he recites). Likewise, his life is valuable but only the part of it he lives with Allah and for Allah.''[4]

3. What is atheism and what are the types of atheists?

Semantically speaking, 'ilhad' (the Arabic word for atheism) means 'to be inclined or have a tendency'.[5] God says: And We surely know that they say, "No one is teaching him except a human." But the man they refer to speaks a foreign tongue, whereas this ˹Qur'an˺ is ˹in˺ eloquent Arabic. (The Qur'an 16:103). The word 'youlhidoun' in the original Arabic Quranic text means 'to deviate or to incline'. However, terminologically speaking, atheism is the rejection of belief in the Creator, the Unseen (the angels, the devil, heaven and hell and future events), the prophethood, the Resurrection and the Reckoning.

By and large, atheists are those who disbelieve in the existence of God, but there are different types of atheists. Deists, for instance, are a subcategory of atheists who believe in the existence of the Creator, but reject all religions. However, agnostics neither believe nor disbelieve in God in that they assert that it is impossible for human beings to know anything about how the universe was created and whether or not the Divine exists. In other words, agnostic atheists are in a somewhat stuck position, whereas apatheists are the atheists who exhibit apatheism, that is to say they think that the topic of God and religion is irrelevant, meaningless, or disinteresting. Overall, we can refer to the adherents of these various subgroups (i.e. deists, agnostics and apatheists) as 'non-religious' people. Finally, humanists are the group of irreligious people who commit to the perspective of human centrality, but they are not necessarily atheists. So these are the most famous doctrines in modern atheism.

As we have explained earlier, there is a difference between the semantic definition of the word atheism which means 'to be inclined or have a tendency'and its terminological definition.

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[4]Ibn Kayyim Al-Jawziah, *Al-Jawab al-Kafi*, (Beirut: Daar Al-Kutub Al-'Ilmiyyah, 2011), p.180.

[5]Ibn Manzur Muhammad, *Lisān al-'Arab* (The Arab Tongue). See the root word 'lahada'.

Hence, the straying Muslim sects such as those who denied the names and attributes of Allah are ‘mulhidun’ or atheists in the semantic sense of the word. Therefore, the mentioning of the word atheism (ilhad) in the writings of the early Muslim scholars is not synonymous to its contemporary terminological meaning which mainly refers to the rejection of belief in God and Prophets. Rather, they used it to denote a deviance in some aspect of the Islamic creed ('aqeedah), mainly the denial of Allah’s names and attributes. Thus, it is absolutely wrong to claim that Ibn Sina or any of the early Muslim philosophers were atheists in the modern-day sense of the term, for they only had some defects in 'aqeedah (creed).

4. When did atheism begin?

As a matter of fact, prior to the 18th century atheism, in its contemporary terminological sense, did not exist in that apart from what is attributed to Diagoras of Melos belief in the Creator was pervasive throughout the history of nations.[6] In other words, except for some claims here and there, there is no evidence of anyone, neither in the East nor in the West, who denied the existence of the Creator before the eighteenth century. Will Durant, the famous historian, asserts in *The Story of Civilisation* that ‘‘the conventional claim for the universality of religion (i.e. religion is a phenomenon pervasive in all human societies) is still valid.’’[7]Analogously, Ash-shahrastani affirms: ‘‘I am not acquainted with anyone who rejects the Almighty, All-Wise and All-Knowing Creator.’’[8] Hence atheism is a relatively new parasitic phenomenon in the history of the human race as Dr. Abd Allāh ash-Shahrī contends: ‘‘atheism has appeared only as a shark fin in the midst of the stormy ocean of religion.’’[9]

5. How did atheism begin?

Atheism began during the 18th century which was an era of religious skepticism and biblical criticism in that a wave of biblical interpretation by secularist intellectuals and Enlightenment thinkers appeared in Europe. In fact, the distorted interpretation or

[6] Diagoras of Melos 406 B.C.

[7]Will Durant, *The Story of Civilization*, (New York: Simon & Schuster, 1935), volume 1, p. 99.

[8]Tadj Ad-din Ash-shahrastani, *Nihayat al-aqdam fi 'ilm al-kalām (The End of Steps in the Science of Theology)*, (Beirut: Daar Al-Kutub Al-'Ilmiyyah, 2004), p.3.

[9]Abd Allāh Shahrī, *Thalāth Rasā'il fī al-ilḥād wa-al-'ilm wa-al-īmān* (Three Letters in Atheism, Science and Faith), (Beirut: Markaz Namā' li Al-bahth wa Ad-dirassāt, 2014).

misinterpretation of the religious texts is absolutely the most dangerous gateway to atheism. Actually, a common rule for proper interpretation especially when it comes to the study of religious texts is that ‘‘a text taken out of context becomes a pretext’’, that is a scripture read without thought to the context is easily misconstrued and gives way to the danger of forming a pretext out of the text (i.e. bad interpretation), which undermines its value, authenticity and reliability. In other words, atheism spread in the West as a result of the loss of trust in the religious texts because the Enlightenment thinkers and philosophers claimed that the Bible was not trustworthy. It is noteworthy that the so-called Muslim Enlightenment intellectuals in our countries are bent on doing the same with Islam in that they try to tamper with the texts of the Qura'n and Sunnah in order to twist their meanings and undermine their value and reliability. For example, there is a consensus among scholars that alcohol consumption is strictly prohibited. But, the Muslim Enlightenment thinker would argue that he will interpret the religious texts so as to make alcohol permissible. Quite simply, he will read meaning into the texts instead of taking meaning from them, that is he takes texts out of their context to make a point he decided was true in advance (alcohol is permissible in this example). In a word, this practice led to the beginning of atheism in Europe and is at the heart of the current enlightenment project in the Islamic World.

As it happens, during the rationalist advance of the eighteenth century anti-religious thought became pervasive with the eclipse of Christian theology. In other words, this era witnessed a rise in the movement of deism (belief in God) which emphasized morality and rejected the Orthodox Church view. Actually, Voltaire, the French philosopher, was the most famous anti-religious figure of that era.[10] However, it is worth mentioning that he was not an atheist in the contemporary terminological sense of the word atheism, for the rejection of the existence of God, which is the essence of contemporary atheism, did not appear even during this era. Hence, while Voltaire rejected the Christianity of the Church, he had no objection to explaining morals in the light of religion to his domestic workers. He used to say: “had it not been for the existence of God, my wife would betray me and my servant would steal me.” Most strikingly, he built a church near his palace at the end of his life and inscribed the phrase ‘‘Oh Lord, remember your servant Voltaire’’ in its entrance,[11] and claimed that it was the only church

[10]Voltaire (1778 A.D)

[11]Will Durant, *The Story of Civilization*, (New York: Simon & Schuster, 1935), volume 38, p. 214.

dedicated to God alone on this earth, while other churches are dedicated to the saints. Accordingly, he used to send his servants to the church regularly and pay the fees for teaching their children the rules of religion. In short, many others like Voltaire held that without belief in a God who punishes evil, the moral order of society would be undermined and since atheists gave themselves to no Supreme Authority and no law and had no fear of eternal consequences, they were far more likely to disrupt society.

In point of truth, with the advent of the nineteenth century, the philosophic roots of atheism emerged in the works of materialist thinkers who rejected religion as detrimental to the human mind and to human progress. Initially, the economic theorizing for atheism appeared with Karl Marx,[12] the founder and primary theorist of Marxism, who deemed economy to be the main infrastructure of society and that all things, including morality and social structures, were rooted in economics. He advocated atheism and believed religion would disappear in the communist countries while a form of secular or religionless humanistic naturalism would emerge. Additionally, Charles Darwin brought forth his theory of evolution stating that new species arise naturally by a process of evolution and natural selection, rather than having been created.[13] After Darwin, the founder of the French school of sociology Emile Durkheim rose to prominence.[14] As far as the genesis of religion is concerned, Durkheim was the most famous advocate of the conception that religion originated in the totems created by ancient human clans. Basically, he investigated the origin of religion and examined totemism from a sociological and theological point of view. He claimed that the religion of the Australian aboriginal tribes is the most primitive of all religions wherein the germs of all higher forms are found. He explained that Australian aborigines have animal names due to the sacredness of animals in their totemic religion. In a word, the very heart of his thesis is that society and 'the god' of all historical religions are really identical. Thus, his big idea is that by worshipping the totem, clan members actually worship society.

[12]Karl Marx (1883 A.D).

[13]Charles Darwin (1882 A.D).

[14]Emile Durkheim (1917 A.D).

However, contemporary sociologists and anthropologists criticised Durkheim's perspective on the grounds that there are entire nations and civilizations in differet continents where people clearly believe in God (an omnipotent being) despite not having any totems.[15] In other words, they strongly opposed the formulation of totemism as the oldest religion because many cultures in the world have never passed through the stage of totemism at all. Durkheim's counterparts insist that totemism has nothing to do with religion because totems are just ethnic symbols that identify the tribes by their lineages, that is to say they are similar to the flags of present day countries. Additionally, other arguments were raised against Durkheim's absurd theory due to his depreciation of the individual aspects of religious phenomena in that he subordinated the individual aspects of religion to the social, whereas religion is in reality the fundamental life stance of the person who believes in transcendent reality. In other words, it is an individual relationship between man and his Lord. Actually, a couple questions come to mind: how does the collective mind create religion? And was there any religion that got directly accepted by society after its emergence? On the contrary, the people of different nations adopted the same attitude against the invitation of the Prophets in different ages for thousands of years. In other words, rebellion and transgression were the same fixed answer given by all the ignorant people of every age to whoever called them to the service of Allah and to lead a God-conscious life. Furthermore, Durkheim's theory does not answer the perfectly legitimate questions: where did this idea of God—as an omnipotent being and the creator of everything—come from? And if religion, as he claimed, originated in the ancient totems, then which one, amongst the primitive clans or tribal societies, was this idea formulated upon? How were people, across the world and throughout the history of all the Prophets, invited to the way of God?[16] Most strikingly, it is worthwhile mentioning that other scholars have discovered that the idea of the totem in the

[15]Andrew Lang, *The Making of Religion*, (New York: AMS Press, 1968).

[16] Abdallah Draz, *Ad-Din*, (Damascus: Dar Al-Qalam, 2008).

ancient tribes is an economic idea and not a religious one. Unfortunately, Durkheim's invalid claims have been taught as historical facts for decades in European universities. For instance, he claimed that the erotic manifestations of tribe orgies constitute a necessary element of the social and religious psychology of primitive tribes, whereas it has been proven that these parties were a rebellion against the structure of social and religious life in the tribe. In fact, this remains Durkheim's most famous fraudulent misrepresentation because the tribal systems in all societies are based on complete separation of the sexes.

In a nutshell, a lot of misinformation penetrated into the European mind at the hands of Karl Marx, Charles Darwin and Durkheim, which resulted in a wave of skepticism and atheism. Incontestably, atheism materialized at the onset of the twentieth century in that many countries adopted Karl Marx's economic theoriy. Consequently, many eastern European countries embraced the ideology of communism as well as Russia, China, Vietnam, Cuba…etc. Moreover, Adolf Hitler, one of the world's most notorious eugenicists, adopted the social Darwinist take on survival of the fittest and drew inspiration from it in designing Nazi Germany's racially based policies which targeted certain groups and races that were considered biologically inferior for extermination. In fact, the Second World War started on the basis of the concept of survival of the fittest and the extermination of the sub-humans or the degenerate races which supposedly aimed at improving the human race by ridding society of its "undesirables."

Untermensch

Untermensch (German pronunciation: [ˈʔʊntɐˌmɛnʃ] *underman*, *sub-man*, *subhuman*; plural: *Untermenschen*) is a term that became infamous when the Nazis used it to describe non-Aryan "inferior people" often referred to as "the masses from the East", that is Jews, Roma, and Slavs – mainly Poles, Serbs, and later also Russians.[1][2] The term was also applied to Blacks, Mulattos and Finn-Asian.[3] Jewish people were to be exterminated[4] in the Holocaust, along with the Polish and Romani people, and the physically and mentally disabled.[5][6] According to the *Generalplan Ost*, the Slavic population of East-Central Europe was to be reduced in part through mass murder in the Holocaust, with a majority expelled to Asia and used as slave labor in the Reich. These concepts were an important part of the Nazi racial policy.[7]

The attitude underlying the concept of "untermensch" existed before the word was first used in that sense in 1922. This propaganda poster from World War I depicts the fist of Austria-Hungary crushing its subhuman enemy, a chimpanzee-faced Serb wearing Ottoman slippers and carrying the assassin's dagger.

By and large, the atheistic ideologies led to the disappearance of the meaning of 'Man,' which is the reason why they failed to survive in that Nazism declined after revealing the ugly face of racism and the Soviet Union disintigrated with the collapse of communism. Without a doubt, these distorted atheistic theories are unable to adequately analyze and understand the

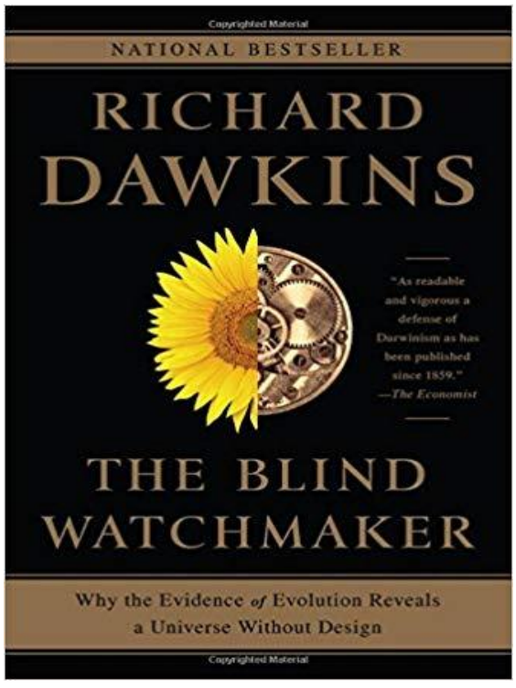
phenomenon of 'Man'. Notwithstanding, at the advent of the twenty-first century proponents of atheism started to claim that science has made it more acceptable to be an atheist because it explains how the world works and, to use their words, there is no need for a 'God of the gaps'. New atheists therefore started to argue, on the pretext that their thinking is evidence-based, that they do not believe in God and that they believe in science. Hence, they dressed up atheism in the clothing of science and falsely called it ''scientific atheism.'' In other word, new atheists, in their crusade against faith, claim that science supports their views and that atheism is the ideology of choice for the educated and enlightened, and is the only mindset of the rational and scientifically minded. Unfortunately, they use the wand of science to lure the half-learned and the young generation by means of sciolism. Actually, their feigned scientific claims are no less superficial than the old atheistic claims. Nonetheless, fake science is extremely dangerous to humans. Hence, the objective of this book is to prove that 'new atheism' is inconsistent with science, and to debunk the myth that science and faith are in conflict.

6. How did the universe emerge?

This is the first rational question that we can think of when we look around and there can hardly be a bigger question than this quest to discover our ultimate origin. Obviously, new atheism, similar to the old atheism or the earlier historical forms of atheist thought, answers this question by attributing to nature the ability to create or originate. In other words, they claim that nature is responsible for bringing itself into exsistence, for originating life, for providence and for granting of agency or 'taqdīr' (i.e. living beings are granted agency through their own selves and not by Allah). New-atheists therefore argue that a creator is not necessary to create the universe and set it going because the "Big Bang" was an inevitable consequence of the laws of physics such as gravity, and God did not intervene in it. In other words, they state that a creator of the universe is redundant because the universe can and will create itself from nothing, that is to say spontaneous creation (i.e. the spontaneous generation of the first living cell) is, to borrow atheist scientists' words, the reason there is something rather than nothing (i.e. why humans and the universe exist). In short, nature is everything for atheists as asserted by the American agnostic scientist Carl Sagan: "the Cosmos is all that is or was or ever will be.''[17] In fact, Sagan showed great reverence for nature and made a career of exploring and marveling at the wonders of the universe. Ironically enough, he was so astounded by the beauty and complexity of the universe

[17]https://www.youtube.com/watch?v=1-OdJmAefOY (3:12-3:18)

itself, that he saw no need to go seeking God to explain it. In fact, his philosophy was that no concept of a creator or overseer could possibly match the awe-inspiring grandeur of nature itself. Analogously, Thomas Huxley who was Darwin's friend and an outspoken advocate for his theory of evolution by natural selection, as the nickname ‘‘Darwin's bulldog’’ would suggest, revered nature so much that he chose to refer to it as Dame Nature. If truth be told, nature is the larest idol set up as a rival to God in the history of human disbelief, which leads us to say that atheism, in its essence, is a form of paganism. Ritchard Dawkins, a British evolutionary biologist famous for his enthusiastic advocacy of atheism, coined the term ‘‘the blind watchmaker’’ to denote natural selection, alluding to the Argument from Design, an argument for the existence of God put forward by theologian William Paley who developed the famous metaphor of the skilled watchmaker. Paley argued that if he found a watch while crossing a heath he would conclude that it must have had a maker, because it is too intricate and precise to have arisen by accident, and that for the same reason the intricacy and precision of the works of nature forced him to conclude that they too must have had a maker, namely God. However, Dawkins argues that natural selection plays the role of a watchmaker in nature, but it is a blind one—working in fashioning the complicated structures of the universe without foresight or purpose.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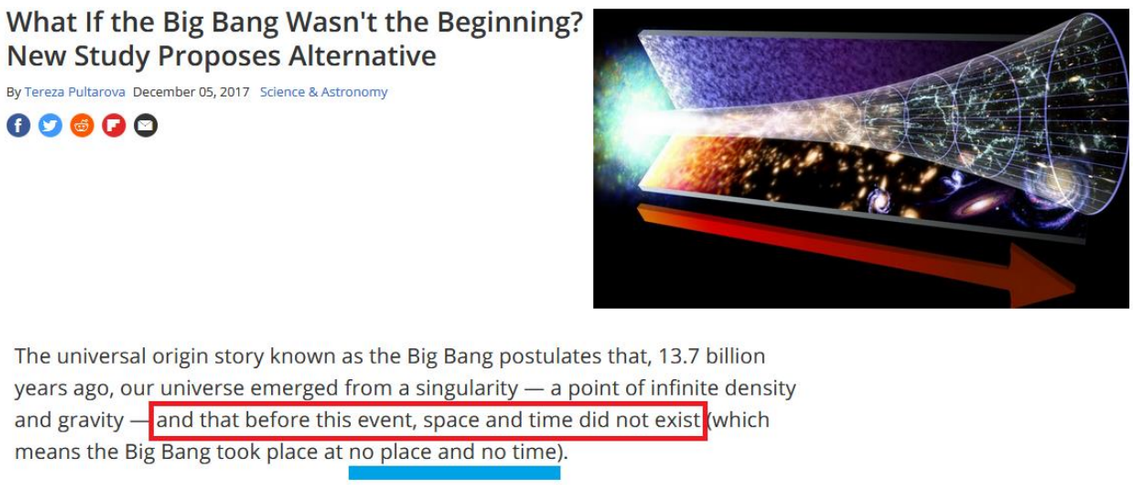
Oddly enough, atheists believe that nature has arisen by accident and has no maker. Therefore, this pagan image, indeed, makes atheism fall under the umbrella of heathenism. Actually, naturalistic paganism is a more accurate description of atheism. Interestingly, polytheism (the worship of many gods) is not essential to paganism and somehow atheists’ reverence for nature fills that role. As a matter of fact, pagan atheists view nature itself and the

universe at large as the environment that births and sustains life, and as the magnificent framework of which all humans are a part. They also believe that the distinction between natural and supernatural is a false one because nature is the totality of all there is. They even claim that it is meaningless to speak of anything being somehow outside of nature. Funnily enough, when the atheist conquers the summit of the atheism mountain, as Hosam Aldin Hamid put it in his book, he realizes the pagan nature of his creed: ‘‘the atheist was climbing the mountain of sophistry and while he was about to conquer the highest of its peaks he was intercepted by the last rock. And as he ascends this last rock a group of pagans, who were there before him in that same place centuries ago, came into sight.’’[18] Though it sounds absurd, contemporary atheists, in their reverence for nature and in attributing the ability to birth and sustain life to it, and in their philosophy of determinism which makes an ‘interventionist’ God's existence logically impossible, are no different from pagans who associated stones with God (in worship) thousands of years ago.

Up to the twentieth century, atheists believed, as assumed by science, that the universe had always existed and therefore did not necessitate a creator, but this assumption proved to be untrue as scientists discovered that the universe had a beginning. In fact, Stephen Hawking, the atheist theoritical physicist and cosmologist, helped to prove that this assumption, so dear to the hearts of atheists, was wrong. Today, there is a large consensus among physicists that the universe is is not eternal and that the ‘‘Big Bang’’ took place at no place and no time i.e. space and time did not exist before this event.


What If the Big Bang Wasn't the Beginning? New Study Proposes Alternative
By Tereza Pultarova December 05, 2017 Science & Astronomy
The universal origin story known as the Big Bang postulates that, 13.7 billion years ago, our universe emerged from a singularity — a point of infinite density and gravity — and that before this event, space and time did not exist (which means the Big Bang took place at no place and no time).

[18] Hosam Aldin Hamid, *Al-'ilhād: Wuthuqiyyat At-tawahhum wa Khawa' Al-'adam*, (Cairo: Markaz Namā' li Al-buhuth wa Ad-dirassāt, 2015), first edition, p. 110. (Not literal).

In point of truth, scientists of all worldviews agree that the physical constants of our universe and the conditions of the early universe are exquisitely fine-tuned for life. Surely, this disturbing scientific discovery was definitely not atheists' cup of tea. Simply put, fine-tuning refers to the surprising precision of nature's physical constants and the early conditions of the universe. Scientists explain that in order for a habitable planet like Earth to even exist, these fundamental constants have to be set to just the right values and slight changes to those values would prevent life as we know it. Undeniably, fine-tuning is proof of God's existence and our fruitful cosmos resonates with the religious understanding of God as the creator of a world fit for life. Hence, scientific explanations increase our wonder and praise of the Creator. In fact, the Qura'n raises questions meant to make the disbelievers realize that whatever they say to deny God is highly irrational. We ask atheists: are humans their own creators? Or, has this vast universe been created by them? If neither of these propositions is true, then they should admit that Allah alone is our Creator as well as the Creator of the universe. God says: Did they come into being without any creator? Or were they their own creators? Or is it they who created the heavens and the earth? No; the truth is that they lack sure faith. (The Qura'n 52:35-36) Assuredly, these are such pungent and stinging questions that they shake the atheistic faith to the root, and belief in God takes root in the heart of any impartial person on hearing these verses.

Interestingly, the famous American agnostic thinker and writer David Berlinski asserts that ''physicists are deeply troubled by the fact that the universe has a beginning because this is a matter that has religious implications.''[19] Similarly, Stephen Hawking confirms this in his book *A Brief History of Time*, saying that ''the reason why some (scientists) are not in favor of the fact that the universe had a beginning in time is because this fact has a religious dimension.''[20] Accordingly, the famous atheist physicist Arthur Eddington admits that scientists' present fundamental conception of physical laws leads them to a dilemma and that he sees no way round it, because when they try to get back billions of years into the past they find the boundary of the beginning of time which is like a high wall that they cannot climb over. He said: ''the notion of a beginning of the present order of Nature is repugnant to me.''[21] In summary, the fact that the

[19]David Berlinski, *The devil's Delusion: Atheism and its Scientific Pretensions*, (New York: The Crown Publishing Group, 2008), p.97.

[20]Stephen Hawking, *A Brief History of Time*, p. 92 as cited in in Kholal Mohammad Amin, Al-'lm Laysa Ilāhan *(Science is not a God)*, (Rabat: Dār Al-amān li An-nashr wa At-twzi', 2019).

[21]Arthur Eddington, ''The End of the World: From the Standpoint of Mathematical Physics in Nature'', Nature 127, 447-453, p. 450.

universe has a finite age and that it did have a beginning is a disturbing reality for every atheist. However, some atheists who are not acquainted with the findings of modern science and who lack adequate understanding of the dimensions and implications of these findings may scoff at the significance and value of such a matter.

7. Is it true that the Big Bang was an inevitable consequence of the laws of physics?

To begin with, it is worth mentioning that entertaining such a thought is an actual instance of disbelief stemming from mere indulgence in conjectures without any substantial evidence as God says: They disbelieved in it before and indulged in conjectures from far away. **(**The Qura'n 34:53) Unquestionably, atheists want to find a way out of the aforementioned dilemma (i.e. the universe not being eternal). However, the idea that the laws of physics existed before our universe is scientifically ridiculous for the notion ‘‘before’’ can not exist before the emergence of the universe due to its being time-related, and scientists agree that time did not exist before the ‘‘Big Bang’’ event. Nonetheless, atheists put their concerted effort to explain that God is not necessary to create the universe because the “Big Bang” (i.e. spontaneous creation) was an inevitable consequence of the laws of physics such as gravity. In fact, atheists’ attempt to escape this dilemma is a leap beyond logic because it requires the prior existence of gravity whilst they do not even attempt to explain neither how gravity came to be nor how it can supposedly create a physical reality. The question would still persist: if the universe was not created by God, then who created it and how? What is most intriguing here is that instead of seeing gravity as God’s law atheists use it to theorize about spontaneous creation. This merely shows how atheists turn a blind eye to both God and logic ending up in mere scientism, that is to say an opinionated attempt to justify atheism and avoid a religious explanation of creation.

As a matter of fact, the law of gravity is a mathematical description of a specific event and is not the event itself. Simply put, it explains the cause of the fall and movement of objects only. It is obvious that the law of gravity does not in any way explain where these objects come from and it would be ridiculous to assume that it (the law of gravity) is the reason why they exist. In layman's terms, the law of gravity does not create a billiard ball but simply describes the movement of its fall to the ground i.e. gravity is not an independent entity, but rather a description of a physical event. Funnily enough, we can, by atheists’ logic, say that the existence of the law of gravity is sufficient to create the billiard ball, the billiard stick, and the billiard player. Without a doubt, this is a silly superstition used in a desperate attempt to justify their

atheism nonsense. By analogy, the laws of internal combustion in a car's motor did not create the car's motor and it would be sheer nonsense to assume that these laws have the capacity to create the motor, the spark of combustion, the gasoline, the driver and the road. Ironically enough, only atheists can entertain such an irrational conjecture and preposterous thought as the only way out of all the real problems with atheism. In fine, science cannot answer the most simple of our questions: where did the universe come from? However, when rightly used science can and does point us to God, Who answers this and all questions.

8. Perhaps we will discover in the future how the universe emerged?

Unfortunately, atheists claim that future developments of science will find an escape from their current dilemma pertaining to the beginning of the universe. However, in reality, this statement is a fallacious appeal to the future and one of the most common logical fallacies that atheists fall into. It is as if they say ‘‘we will disbelieve and hopefully there will be some scientific discovery in the future that will support the creed of disbelief.’’ Funnily enough, they reject the existence of God hoping that science may discover some evidence at some point in the future, by the coming of which they will most likely be dead. In other words, this is a mere escape to the future wherein atheists claim that their worldview will soon prevail and that their victory is just round the corner because the evidence is in the making. Indisputably, this is something that pseudosciences do all the time and chances are the atheists of the future generations too will fall into the same trap. God says: And those who dispute concerning Allah (His Religion of Islamic Monotheism, with which Muhammad has been sent), after it has been accepted (by the people), of no use is their dispute before their Lord, and on them is wrath, and for them will be a severe torment. (The Qura'n 42:16)

It is therefore not wise in any way to resort to speculations and delusions to prevent the interpretation of the phenomenon of the emergence of the fine-tuned universe in its context which denotates the Creator. Undoubtedly, logic and reasoning demonstrate that the material universe is the effect of having been made by an intelligent creator who perfected all things. Hence, denying this truth is but an instance of holding the function of the mind in abeyance, for if we keep denying the Creator in spite of all the logical proofs and sound arguments for His existence, then when shall we submit to Him? On the Day of Judgment, the disbelievers will wish they had listened to the Prophets with attention or that they had used their intellect to understand their message. God says: And they will say: "Had we but listened or used our intelligence, we would not have been among the dwellers of the blazing Fire!' (The Qura'n

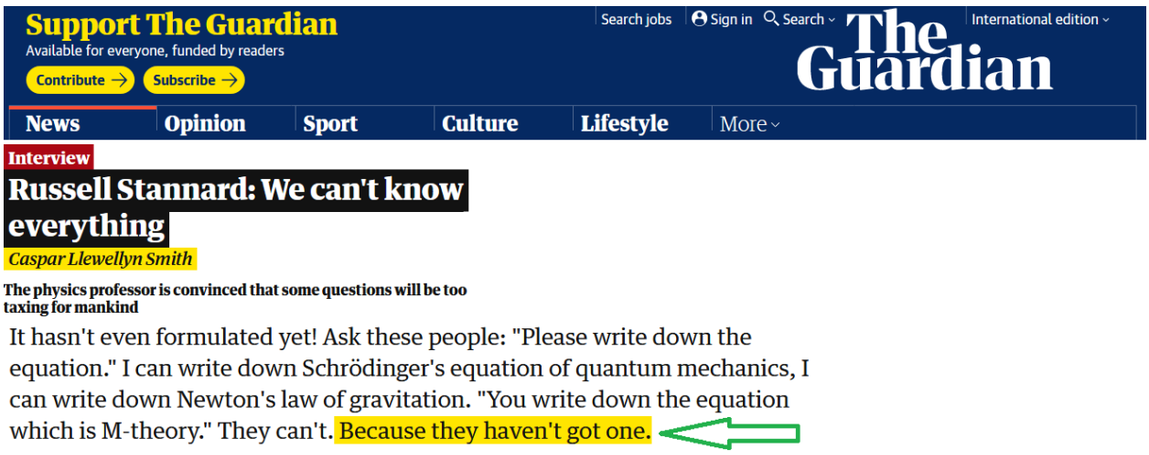
67:10) Here listening has been given priority because listening to what the Prophets teach is the pre-requisite of obtaining guidance, that is without the Prophets' guidance man cannot by himself reach the truth directly by using his intellect and common sense.

As we have explained earlier, scientists of all worldviews agree that the physical constants of our universe are exquisitely fine-tuned for life, that is our universe could not support life if it had physical constants with even slightly different values. For example, the strength of gravity has to be exactly right and if it were to be changed by even a tiny fraction of a percent—say, one billionth of a gram heavier or lighter the universe would move along a very different path. And remarkably, every one of these different paths leads to a universe without life in it, whereas our universe is the only one friendly to life. Certainlly, such fine-tuning cannot be a lucky accident. Even atheist scientists admit that our surroundings are far from being a "fortuitous concourse of atoms." Conversely, the picture of the world, as drawn in existing physical theories shows arrangements of the individual elements for which the odds are against an origin by chance. Now, does science support the views of atheists or does it point to the existence of God? Indeed, a true science does not make atheists, but rather prostrates men before the Deity. Now, I invite you readers to let your mind be your judge.

9. Our universe is the one, among other parallel universes, that by chance supports life. Why not?

In recent years, atheist scientists have put forth the multiverse theory in their attempts to explain away fine-tuning. This theory states that our universe is not the only one, but many universes exist parallel to each other. They argue that each of these universes has different properties and different values of the basic constants of physics and only a few universes would be suitable for life. They therefore claim that if the number of these universes is extremely large, it would be less surprising that one of them (i.e. Earth) would happen to provide the specific conditions for life. However, some cosmologists debate whether the multiverse is in the realm of science and argue that using it as an explanation would weaken the very nature of scientific reasoning because the predictions for other universes are virtually impossible to verify. John Polkinghorne, a prominent theoritical physicist, says: ''Multiverse is not physics. It is at best a metaphysical conception, and there is no single scientific reason for believing in a group of

multiple universes. There is no scientific evidence to make me believe this idea.''[22] Moreover, the bright British nuclear physicist Russel Stannard says: ''ask these people to write down the equation which is M-theory. They can't because they haven't got one.''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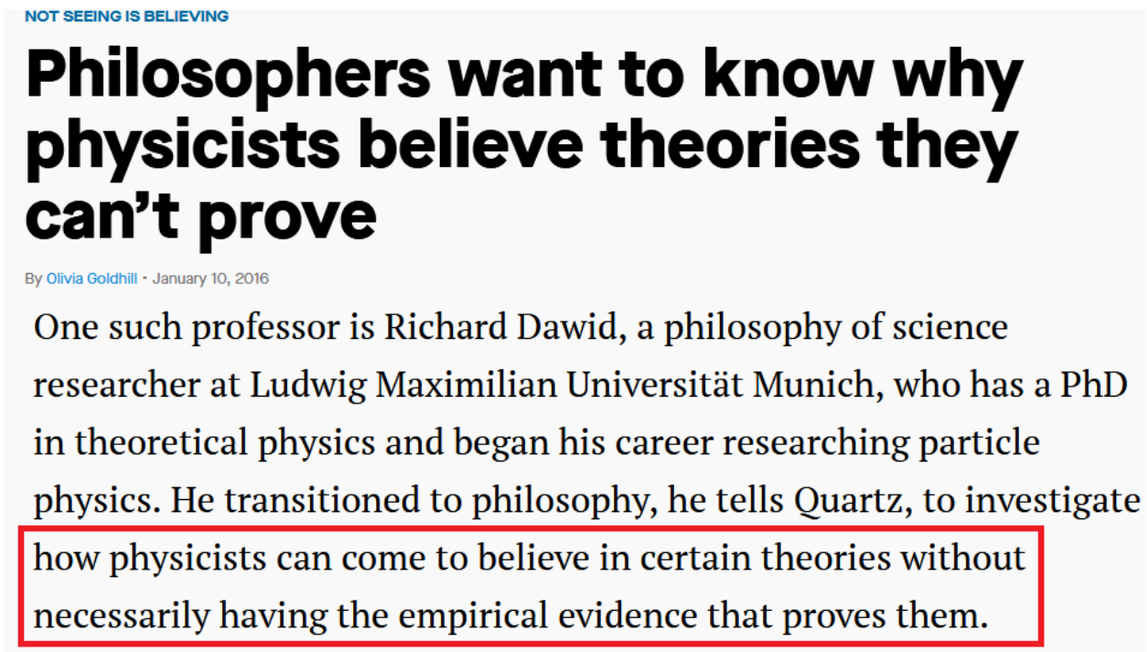
Interview
Russell Stannard: We can't know everything
Caspar Llewellyn Smith
The physics professor is convinced that some questions will be too taxing for mankind
It hasn't even formulated yet! Ask these people: "Please write down the equation." I can write down Schrödinger's equation of quantum mechanics, I can write down Newton's law of gravitation. "You write down the equation which is M-theory." They can't. Because they haven't got one.

In fact, the multiverse theory enjoys no observational support whatsoever and there is absolutely no emperical evidence for it. It is unarguably absurd that some atheist scientists believe and advocate theories that they can not prove. Professor Ritchard Dawid, a philosophy of science researcher and a theoretical physicist, told the Quartz to investigate how physicists can come to believe in certain theories without necessarily having the empirical evidence that proves them.


NOT SEEING IS BELIEVING
Philosophers want to know why physicists believe theories they can't prove
By Olivia Goldhill · January 10, 2016
One such professor is Richard Dawid, a philosophy of science researcher at Ludwig Maximilian Universität Munich, who has a PhD in theoretical physics and began his career researching particle physics. He transitioned to philosophy, he tells Quartz, to investigate how physicists can come to believe in certain theories without necessarily having the empirical evidence that proves them.

Interestingly, even if multiple universes existed they would still remain causally isolated, that is to say each universe would be an independent event that has nothing to do with the

[22] John Polkinghorne, *One World*, p. 8022 as cited in Kholal Mohammad Amin, *Al-'lm Laysa Ilāhan (Science is not a God)*, (Rabat: Dār Al-amān li An-nashr wa At-twzi', 2019).

previous ones. In other words, each universe would have its own independent laws and the emergence of some of these universes would not account for that of the others. Moreover, the multiple universes, like our universe, would not be eternal as physicist Allen Guth, one of the most famous advocates of the multiverse theory, asserts that there would be an ultimate beginning somewhere to all these universies.[23] Furthermore, some scientists argue that even if the multiverse models were right and well-established on a scientific level, they would not eliminate the fine-tuning. Simply put, while the multiverse explains some properties in our universe that previously appeared fine-tuned, the fine-tuning is not eliminated, but pushed a step back into the origin of the multiverse itself. In other words, if multiverse theories are shown to be correct, they could not replace God, because even if they eventually explain scientifically how our universe began, the multiverse itself would still be God's creation. Hence, this would be the next step in understanding the beauty, splendor, complexity, and vastness of God's creation. Assuredly, the atheistic many-universe theory can never eliminate the problem of design the atheist faces; rather, it seems simply to move the problem of design up one level. In short, as some intelligent design scientists put it, whether universe or multiverse, God is the Creator and science merely investigates the physical world that God created and sustains, and increases our wonder and praise of Him. To conclude, the Multiverse theory is hardly science and is nothing more than speculative wishful thinking.

I will set forth an analogy to illustrate the futility and absurdity of pretending that the multiverse assumption solves the question of the origin of the universe. Think about a scenario where you and I talk about a little boy. If I ask you: ''where did this little cute boy come from?'' and you answer: ''he has many siblings and some of them might be ugly.'' Would this be an adequate answer to my question? Likewise, if I ask you: ''where did this wonderful universe come from?'' and you reply: ''there are multiple universes.'' Obviously, the question in both scenarios is rational but the answers are ludicrous. In fact, the multiverse assumption or 'trick' does not point away from God or escape the implications of fine tuning. That is, fine tuning will always be an unquestionable reality even if atheist scientists try to 'drown' our universe in billions of universes. Rather, every parallel universe will take it to a higher level since they will incontestably be the handiwork of Allah Who has created everything with perfect wisdom.

[23] https://www.youtube.com/watch?v=NUI9Dq4WTxg (30:29—30:56) as cited in Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), p. 414.

Christian de Duve says: ‘‘If you try to drown a fish in all the oceans of the world, it will still prove its existence and will survive’’[24] because fish can breathe and live their lives underwater. It is noteworthy that, from the standpoint of both reason and revelation, there is no objection to the existence of multiple universes. God says: All praise is for Allah—Lord of all worlds. (The Qura'n 1:2) However, in all the experiments that scientists have ever performed, all the observations they have ever recorded, and all the measurements they have ever made, they have never yet discovered an interaction that demands the existence of something beyond our own isolated universe to explain. Therefore, if the multiverse theory were correct, it is likely that the parallel universes will be disconnected and causally unrelated. In other words, every universe would have its own constants and they will be independent from one another which will leave absolutely no room for chance. Actually, calculations of decoherence between universes indicate that it is essentially impossible for macroscopic objects in separate universes to interact.All in all, based on the scientific evidence we have, at least for now, parallel universes will have to remain a science fiction dream.

10. We are an accidental universe, why not?

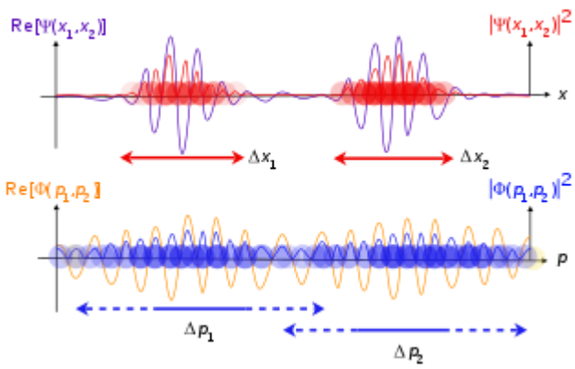
What has happened in the last 15 years or so is that some theoretical physicists believe that our universe is just one lucky draw from the hat (i.e. a vast number of universes all with very different physical properties, some of which might allow life like our universe while some of them may not). However, such a claim stems from an utter ignorance of the fundamentals of probabilities, specifically the fact that chance requires two components: time and space. Simply said, chance requires a time and a spatial presence on which to produce its effect, whilst our universe emerged from a singularity—a point of infinite density and gravity—and before this event, space and time did not exist (i.e. the Big Bang took place at no place and no time). This completely eliminates the notion of chance.

11. Did the concept of causation exist at the moment of the emergence of the universe?

In fact, most Muslim scholars deem the attributes of ‘al-Hayy’ (the Ever-Living) and ‘al-Qayyūm’ (the Self-Existing) the greatest name of Allah. Actually, they are often used together to signifiy the attributes of ever-lasting and self-existing life. Therefore, as Muslims, we believe in Allah's Self-Existence (qayyūmiyat) and that all the creatures, including the heavens and the

[24]Christian De Duve, *Life Evolving*, (New York: Oxford University Press, 2002), p.299.

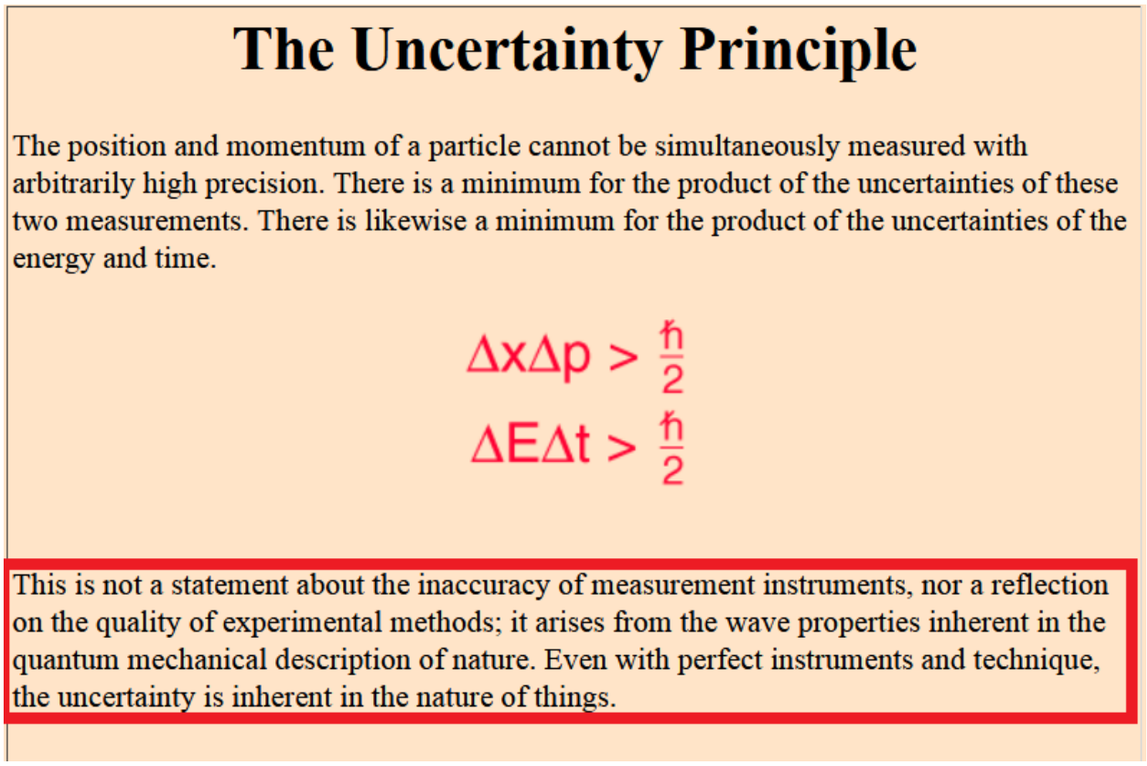
earth, are dependent upon Him, and while everything is bound to go to non-existence, His existence is permanent. In other words, while God is free of any dependence on anything else for existence, He is the foundation upon which all things exist. Most strikingly, when we take a deeper look into our universe, it becomes obvious that it would neither exist nor continue to exist without God. Doubtlessly, the wave function would not show a single pattern of existence except with God Who creates and sustains all things and eternally manages them aright. The wave function, in quantum mechanics, is a variable quantity that mathematically describes the wave characteristics of a particle in that the value of the wave function of a particle at a given point of space and time is related to the likelihood of the particle's being there at the time. In other words, the wave equation cannot tell us where the particle is or how fast it is going because when we are dealing with things at a sub-atomic level, experts in the field admit that we only know probabilities of the where-and-when of a particle, which is not a particle in the everyday sense, but an array of greater and lesser probabilities of being somewhere at some time.



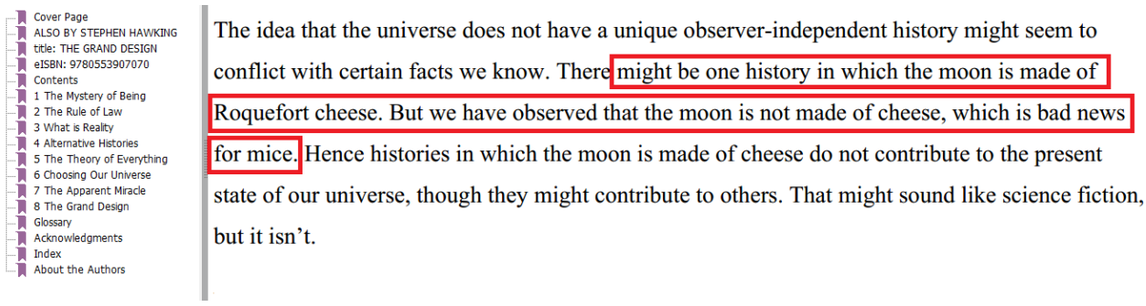
Quantum Mechanics is a science dealing with the behaviour of matter and light on the atomic and subatomic scale. Overall, quantum mechanics has enjoyed a multitude of successes since its formulation in the early twentieth century and is a very accurate approximation to a deeper level theory, which reconciles the deterministic and probabilistic aspects.

The Uncertainty Principle is a fundamental theory in quantum mechanics that defines why a scientist cannot measure multiple quantum variables simultaneously. Commonly applied to the position and momentum of a particle, it states that there is inherent uncertainty in the act of

measuring a variable of a particle in that the more precisely the position is known the more uncertain the momentum is and vice versa. Obviously, this result has nothing to do with inadequacies in the measuring instruments, the technique, or the observer. Rather, it arises out of the intimate connection in nature between particles and waves in the realm of subatomic dimensions. It is hard to imagine not being able to know exactly where a particle is at a given moment, but any other claim would stem form utter ignorance about quantum mechanics, for the uncertainty principle is a universal law.


The Uncertainty Principle
The position and momentum of a particle cannot be simultaneously measured with arbitrarily high precision. There is a minimum for the product of the uncertainties of these two measurements. There is likewise a minimum for the product of the uncertainties of the energy and time.
$\Delta x \Delta p > \frac{\hbar}{2}$
$\Delta E \Delta t > \frac{\hbar}{2}$
This is not a statement about the inaccuracy of measurement instruments, nor a reflection on the quality of experimental methods; it arises from the wave properties inherent in the quantum mechanical description of nature. Even with perfect instruments and technique, the uncertainty is inherent in the nature of things.

Hence, based on the foregoing, the universe is completely deficient and does not control itself because it has no self-awareness and cannot know what it will come to at any given moment. Literally speaking, it is impossible to know what will happen in the universe even in just an instant from now and this is a universal law. Unquestionably, the collapse of the skies and the cracking of celestial bodies is a quantum probability that exists at every moment. God says: Surely Allah holds the heavens and the earth (so) that they do not cease to exist; and indeed in case they cease to exist, decidedly no one would hold them both after Him. Surely He has been Ever-Forbearing, Ever-Forgiving. (The Qura'n 35:41) That is, this limitless universe is being sustained by Allah alone and all creatures are helpless and entirely dependent on Him every moment. Ironically enough, Stephen Hawking says in his last book *The Grand Design*: ‘‘there might be one history in which the moon is made of Roquefor cheese. But we have observed that the moon is not made of cheese which is bad news for mice.’’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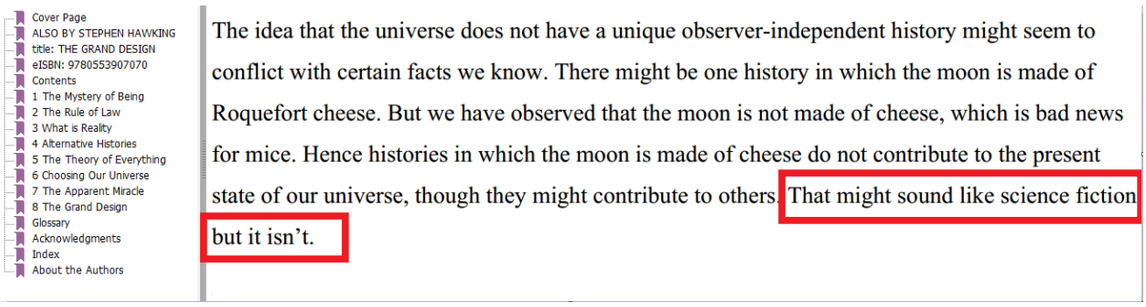
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About the Authors
The idea that the universe does not have a unique observer-independent history might seem to conflict with certain facts we know. There might be one history in which the moon is made of Roquefort cheese. But we have observed that the moon is not made of cheese, which is bad news for mice. Hence histories in which the moon is made of cheese do not contribute to the present state of our universe, though they might contribute to others. That might sound like science fiction but it isn't.

In short, anyone with a basic understanding of quantum mechanics would agree with the fact that anything can happen in the universe at any moment. However, what is most striking is that the universe is fine-tuned, stable and orderly by virtue of divine sustainment. In other words, God is the sustainer of the existence of the entire universe and every particle in it depends on Him from the moment of its emergence. Therefore, the universe would, without this divine sustainment, instantly fall in disorder. God says: Had there been any gods in the heavens and the earth apart from Allah, the order of both the heavens and the earth would have gone to ruins. (The Qura'n 21:22) In fact, the system of the whole universe is functioning according to a universal law in that it could not work so even for a moment if there had been no proper balance and coordination between the different and countless things. Doubtlessly, this universal law binds and forces these things to cooperate and coordinate between themselves with a perfect proportion and harmony. Obviously, the existence of such a system is itself a clear proof that there must be One All Powerful Manager and Administrator governing and ruling the entire universe. In a nutshell, quantum mechanics and the function wave show that the universe is sustained by and dependent upon The Divine. In a word, causation is a fundamental matter since the moment of the emergence of the universe, and divine sustainment is an unquestionable truth for everyone who reflects and contemplates.

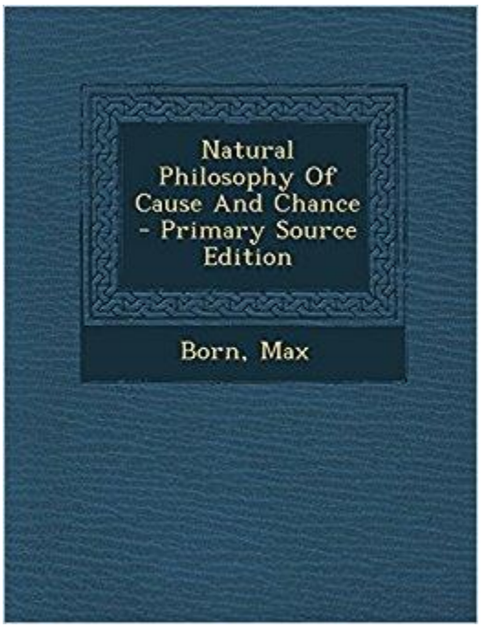
12. Is causation really non-existent in the world of quantum mechanics?

Causality is an axiom which describes the influence by which one event (a cause) contributes to the production of another event (an effect) wherin the cause is responsible for the effect and the effect is dependent on the cause. It is the concept that events within a given

paradigm are bound by causality in such a way that any state (of an object or event) is completely determined by prior states. For example, event ‘A’ leads to event ‘B’. Without a doubt, the basic condition underlying the entire dimension of scientific research is the firm belief in the causal inevitability of natural phenomena. In other words, the scientist’s job is to seek to identify the causes of phenomena and to discover the interrelationships of cause and effect. Thus, causation is absolutely the essence of every scientific and metaphysical (ontological) research. It is therefore needless to say that causation exists in quantum mechanics. However, quantum mechanics has an issue with causal determinism which proposes that there is an unbroken chain of prior occurrences stretching back to the origin of the universe. That is, the idea that everything that happens or exists is caused by antecedent conditions implying that the future is determined completely by preceding events—a combination of prior states of the universe and the laws of nature. Hence, quantum mechanics disproves of determinism due to the ambiguity of the time-frame of events at the sub-atomic realm which is extremely unobvious to scientists. Overall, systems with quantum behavior do not follow the rules that scientists of classical physics are used to because they are hard to see and hard to “feel”, can have controversial features, exist in several different states at the same time and even change depending on whether they are observed or not. As it happens, there are many books that provide different explanations of the concept of time in quantum mechanics and understanding it is one of the most complicated issues.

It is worth mentioning that although some scientists claim that determinism does not exist in quantum mechanics, there is substancial research that shows that it does exist as in the Bohmian Interpretation which many scientific papers have recently supported. At any rate, causation is undeniably one of the axioms of quantum mechanics. Max Born**,** one of the most renowned scientists of quantum mechanics and author of *Natural Philosophy of Cause and Chance*, explains the importance of causation in the field of qunatum mechanics and the difference between the principles of causality and determinism. He won the Nobel Prize in physics for his fundamental research in this field, especially for his statistical interpretation of the wave function. He wrote: ‘‘causality postulates that there are laws by which the occurrence of an entity B of a certain class depends on the occurrence of an entity A of another class, where the word 'entity' means any physical object, phenomenon, situation, or event. A is called the cause, B the effect.’’ He further declared that: ‘‘the claim that physics has given up causality is entirely unfounded.’’ Then he made his famous assertion that causality is an axiom of quantum

mechanics: ‘‘we derive Quantum Theory from purely informational principles. Five elementary axioms—causality.’’[25]



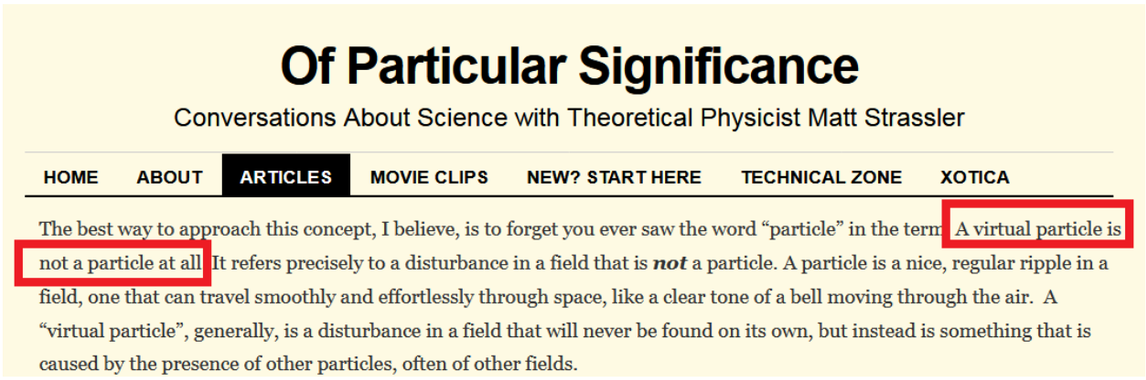
In sum, the formulation of Quantum Theory, in the way it is presently known, requires a well-defined causal structure in the background. Unfortunately, although we know this for a fact, some of our youth are being deceived in the name of science. Honestly, I do not understand the motive behind atheists’ skepticism about causation and why they claim that such a rational informational principle is given up by quantum mechanics. However, we know that though many atheists think that their atheism is the product of rational thinking, atheism is in reality contrary to logic and against reason. Hence, axioms such as causality undermine its foundation and debunk all its arguments. The bottom line is that when you get to the essence of its philosophy, new atheism is self-refuting, self-contradictory and built on sandy soil.

13. Are there particles constantly emerging from the quantum vacuum? Does this mean that ‘matter’ can emerge from ‘nothingness'?

In fact, the hypothesis about the emergence of particles from the quantum vacuum was one of atheists’s most popular fraudulent claims at the onset of the twentieth century in that they argued that things are arising from 'nothing', but what they did not tell us is that ‘nothing’, in physics, is not actually technically nothing. In fact, physicists argue that that ‘nothing’ is not the same as ‘real’ nothing because it exists in the frame and field of time, space, matter and energy. Simply put, this so-called vaccuum contains an amount of energy, albeit infinitesimally weak. In

[25]As cited in Ahmed Ibrahim, *Ikhtirāq 'Aql*, (Riyadh: Markaz Dalā'l, 2016).

other words, it is still 'something' and even at its lowest energy level, there are fluctuations in the quantum vacuum of the universe wherefore there are quantum particles popping into and out of existence throughout it. Quite simply, there seems to be 'nothing', then particles pop, and then the particles collide and we are left with nothing again. Therefore, scientists explain that even if we could remove everything from the universe, we would still be left with these quantum fluctuations embedded in spacetime, and since physicists have agreed that the universe emerged at no place and no time the logical question would be: what is the relevance of this vaccuum phenomenon to the emergence of the world? Interestingly, these particles that emerge from the zero-point fields are called virtual particles, that is to say they are not particles at all. Rather, they are a disturbance in a field and will never be found on their own, but they are caused by the presence of other particles, often of other fields (i.e. they are not real matter at all and they disappear instantly after emerging).



Of Particular Significance

Conversations About Science with Theoretical Physicist Matt Strassler

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The best way to approach this concept, I believe, is to forget you ever saw the word "particle" in the term. A virtual particle is not a particle at all. It refers precisely to a disturbance in a field that is ***not*** a particle. A particle is a nice, regular ripple in a field, one that can travel smoothly and effortlessly through space, like a clear tone of a bell moving through the air. A "virtual particle", generally, is a disturbance in a field that will never be found on its own, but instead is something that is caused by the presence of other particles, often of other fields.

However, it is worthwhile saying that virtual particles can turn into real matter under the right circumstances by interacting with matter and energy. So from the perspective of quantum mechanics there are conditions required in order for virtual particles to emerge:

1. Space.

2. Time.

3. A minimal amount of energy (zero-point energy).

However, such particles would disappear instantly after emerging. Hence, atheists' claim that we could get a universe from nothing is a misstatement because what they call nothing is not really nothing, which is the reason why scientists call it a quantum vacuum. Such statements are bogus and a vain attempt due to atheists' desperate need to justify their delusions, for new atheism is but a superstition. Funnily enough, notorious atheists are convinced that traditional religious belief is dangerously irrational and that a decline in it would lead to a smarter, more scientifically literate and even more civilized populace. However, the reality is that the New

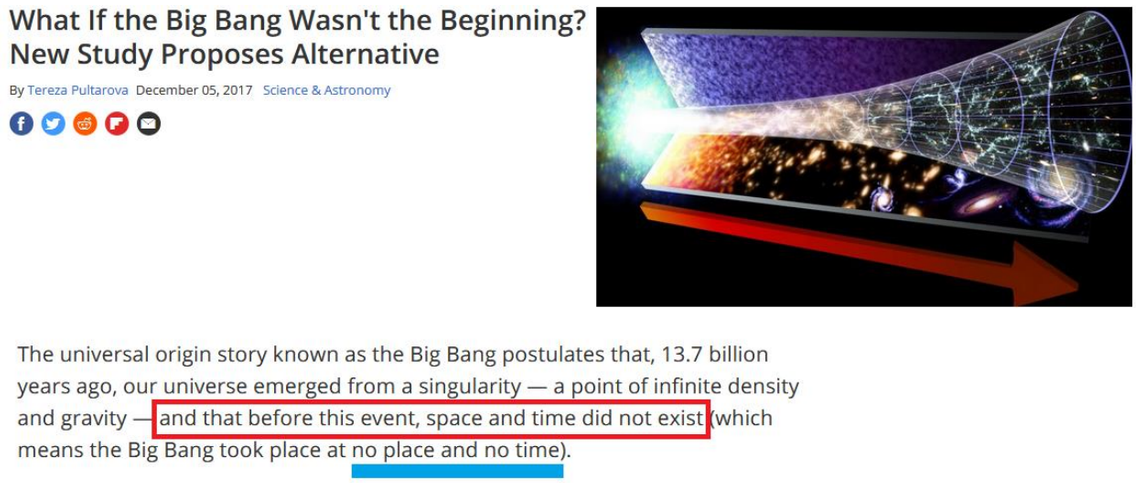
Atheist campaign, by discouraging religion, is far from creating a new group of intelligent and enlightened beings because it is actually encouraging new levels of mass superstition. Moreover, contrary to atheists' claim that there is a war between science and religion and that religion has been steadily losing that war, many eminent scientists believe that science has nothing to do with any turn away from religion. Thus, the so-called scientific worldview championed by atheists inevitably undermines its own rational foundations. In point of fact, religion is the biggest victory of the human mind, whilst atheists cling to desperate assumptions which prove but their suffering.

14. What are the arguments for the existence of the Creator?

Without a doubt, the blessings and favours of God the Most Generous are much more than can be counted and so are the proofs of His existence and perfection. As a matter of fact, the Qur'an presents three primary arguments for the existence of the Creator in addition to many other secondary ones. It may seem odd that I am using the Qur'an as an argument against atheists who do not believe in it. However, what I am putting forward, in effect, is the persuasive rational evidences presented by the Qur'an regarding the existence of the Creator which are so compelling that they are binding on all (i.e. believers and nonbelievers in the Qur'an alike). To begin with, the three primary arguments that establish the existence of God are:

1. The argument of creation (origination):

The question that most human beings eventually ask themselves is about the nature of existence and the origin of life and the universe. The Qura'n addresses this question with a cosmological discourse and a reminder that it was God who created everything and caused it to be. In fact, our intuition and experience tell us that effects have causes, that is to say things come to be because something made them that way. Hence, since the universe is one giant series of causes and effects, it is reasonable to conclude that it had an original cause that set it all in motion. Interestingly, modern physics and cosmology now largely accept the premise of the cosmological argument as fact in that the "big bang" theory postulates that the universe, with all its matter, celestial bodies and laws, began from a singularity somewhere between 12 and 14 billion years ago.


What If the Big Bang Wasn't the Beginning? New Study Proposes Alternative
By Tereza Pultarova December 05, 2017 Science & Astronomy
The universal origin story known as the Big Bang postulates that, 13.7 billion years ago, our universe emerged from a singularity — a point of infinite density and gravity — and that before this event, space and time did not exist (which means the Big Bang took place at no place and no time).

Simply put, everyday experience informs us that all things we witness in life, every effect we see, must have an explanation at some level. Hence, this argument is founded on the a priori premise that the universe has a definite beginning just like all things we experience in life had a beginning at some point. In his *A Brief History of Time*, physicist Stephen Hawking says: ‘‘the universe has a beginning and this matter has religious implications.’’[26] Additionally, physicist Frank Tipler says: ‘‘I have started my professional life as an atheist and never in my wildest dreams did I imagine that the laws of physics would lead me to believe in the Creator.’’[27] The central premise of this argument is that everything that begins to exist has a cause wherefore each particle and each atom in the universe is a proof for the existence of God. In other words, the universe is temporary and not self-sustaining and if you accept this scientific axiom your mind will look for the originator and you will realize, with full certainty, that this universe has a Creator. The Qur'an urges humans to reflect upon the nature of their existence and the universe. God says: Say, "Look at what is there in the heavens and the earth." But, signs and warnings do not suffice a people who do not believe." (The Qur'an 10:101) He also says: And have they not looked into the Dominion of the heavens and the earth and what things Allah has created. (The Qur'an 7:185) Scholars derive from these verses and others a logical train of thought, sometimes referred to as the cosmological argument, which determines that God, as the uncaused cause or first cause, is the most reasonable answer to the existential question. The logic of this argument can be summarized in the following steps: everything in the universe that has a beginning must have a cause. The universe began to exist. Therefore the beginning of the existence of the universe must have been caused by something. The only such cause must be an uncaused cause,

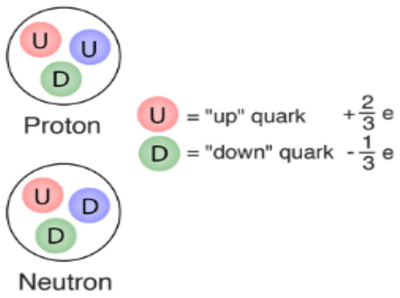
[26]Stephen Hawking, *A Brief History of Time*, (New York: Bantam Books, 1988), p. 92

[27]Tipler Frank, *The Physics of Immortality*, p.ix as cited in Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), p. 436 (non-literal).

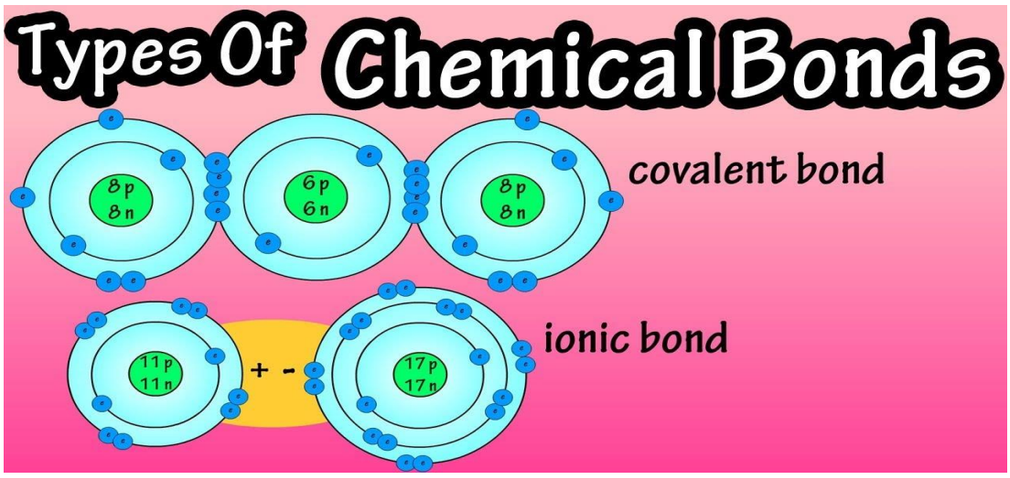
or God. This line of thinking is acceptable to the mind and it finds validation in human intuition and experience as it sufficiently answers the question of why anything exists in the first place. In sum, the only reasonable conclusion is that the universe was caused—it was created—it was made to exist by something greater and more powerful than itself. Surely, the argument in the above verses is so compelling that any impartial person will embrace the truth, especially that established scientific principles agree.

2. The argument of perfection:

The very fabric of the cosmos, from the macroscopic stars to the microscopic world of microbes and everything in between, contains a set of universal natural laws that produce order. The result of these laws is that all things in the universe exhibit identifiable purpose, that is to say everything around us is specifically designed to perform a specific function. In other words, from quarks, which are the smallest particles ever observed, to the largest galaxies, everything in the universe carries a degree of functional complexity. Obviously, this functional complexity is a manifestation of perfection which is definitely superior to mere existence.



In a word, atoms, photons and energy perform specific functions and so do the radioactive elements which have a role in the differentiation of the earth's layers. Moreover, the chemical bonds, namely the covalent and ionic bonds, refer to any of the interactions that account for the association of atoms into molecules, ions, crystals, and other stable species that make up the familiar substances of the everyday world. Basically, atoms are independent entities only occasionally and briefly colliding with one another and are in that sense the basic building blocks of the material world. The atomic clustering refers to two or more atoms joining together chemically to make compounds. For instance, a sodium atom clusters with a chlorine atom to form table salt, while the ceramic atoms never cluster with the atoms in the skin. This clustering could be described as a dance of atoms which is responsible for all the incredible forms and variations around us.



To conclude, everything around us carries a degree of functional complexity and is granted agency to perform a specific task with perfection, and these are all proofs of the divine creation and innovation. In other words, there are so many clear instances of purpose that we repeatedly experience in the different parts of the universe. It is therefore only logical to conclude that the entire universe itself exists as it is for a purpose. David D. Deutch, the famous atheist and professor of quantum mechanics at the University of Oxford, scoffs at the attitude of atheists, who try in vain to explain away the features of perfection and fine-tuning, saying: ‘‘if anyone claims not to be surprised by the special features that the universe has, he in hiding his head in the sand. These special features are surprising and unlikely.’’

Andrew Brown

Thu 8 Jan 2009 17.06 GMT

Dr. David D. Deutch remarked:

> *If anyone claims not to be surprised by the special features that the universe has, he is hiding his head in the sand. These special features are surprising and unlikely.*

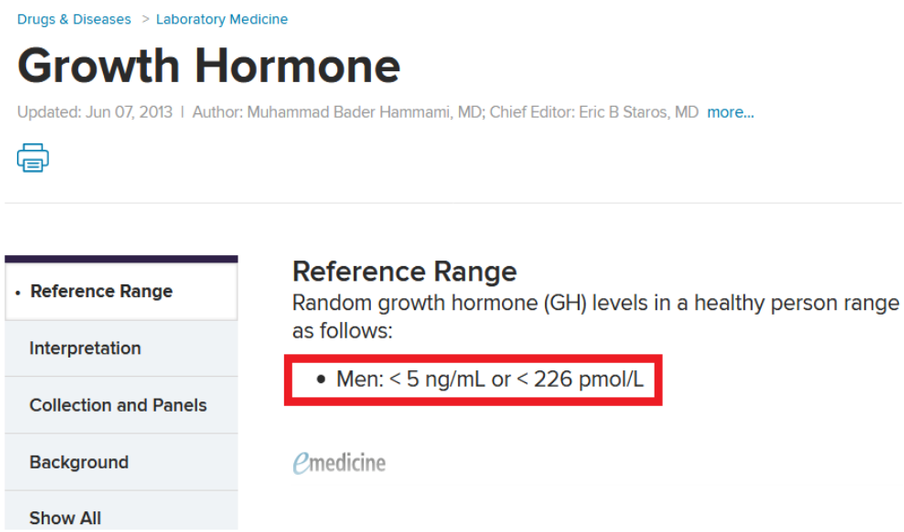
Accordingly, there are many verses in the Qura'n alluding to the perfection argument. God says: This is the pattern of God Who has perfected everything. (The Qura'n 27:88) He also says: Who perfected in the fairest (shape) everything He created. (The Qura'n 32:7) He further says: Glorify the name of your Lord, the Most High, Who created all things and fashioned them in good proportion; Who determined and guided them. (The Qura'n 87:1-3) However, this Divine Perfection argument does not impress atheists who resort to sophism instead of contemplating and reflecting upon the signs. So, Deutch was indeed accurate when he described atheists as ‘hiding their heads in the sand’.

Interestingly, the process of orchids' pollination is such an outstanding example of perfection in divine creation. These flowers lure their pollinators through, what scientists call, sexual deception, that is to say the flower is pollinated by male bees trying to mate with the flower which resembles a female bee. In other words, orchid flowers deceive their pollinators by mimicking the appearance and scents produced by female bees with the requisite shape, colourful markings, and hairs. They also exude a scent that simulates the pheromones produced by receptive females. Hence, when the male lands on the flower, it grabs the labellum and attempts to copulate with it. In the process, the flower deposits pollinia on the insect's head, to be carried and placed on the next flower he visits.

Remember, as you contemplate, that this amazing flower is just a being that has neither self awareness nor self-management. However, it lives, by virtue of this miraculous pollination feature, in an ideal biological equilibrium with other organisms. Verily, glory be to God Who starts and finishes the creation of everything with perfection and excellence. Even Charles

Darwin admitted one year before his death that what the orchid flower does is mind boggling.[28] Oddly enough, in spite of all the aspects of perfection in the universe, atheists choose to live in a constant state of sophism. Nonetheless, whoever looks at the proofs of perfection with impartiality will inevitably surrender to the Creator, the Maker and Evolver of everything from nothing, the Fashioner and the Bestower of Forms, the Guide, the All-Knowing, the All-Wise and the All-powerful.

Furthermore, if you want to see for yourself another aspect of divine perfection, go to a medical analysis laboratory and look at the fine tuning of the hormonal symphony in our bodies. For instance, the normal range for growth hormone (GH) level is typically < 5 ng/mL or < 226 pmol/L for adult males. So using a simple mathematical equation we find that 1 g of this hormone is divided amongs 3000 persons, which denotes an incredible accuracy. Likewise, the normal range for GH level is typically 10 to 50 ng/mL or 440 to 2200 pmol/L for children. It is noteworthy that an excess in the GH level even by a tiny fraction of a percent—say by 1/100000000 gram leads to gigantism (giantism). Similarly, a deficiency in GH level even by a tiny fraction of a percent—say 1/100000000 gram results in dwarfism.

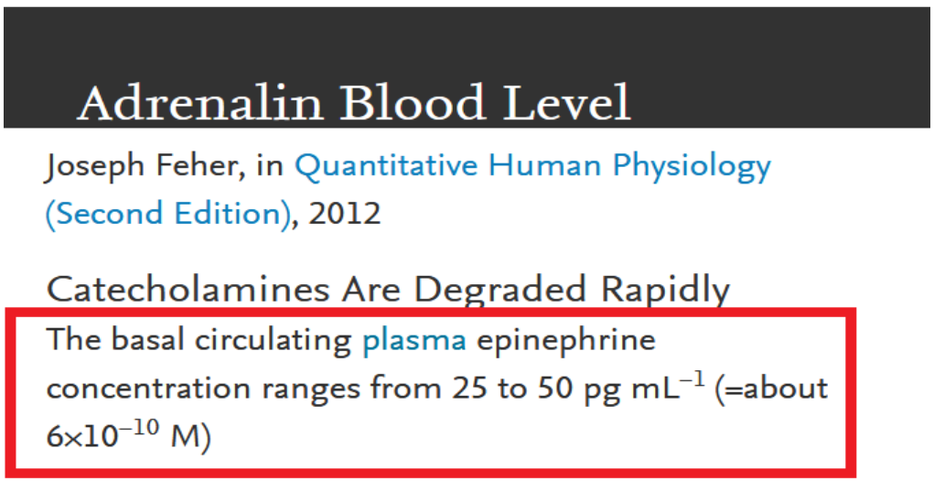

Drugs & Diseases > Laboratory Medicine
Growth Hormone
Updated: Jun 07, 2013 | Author: Muhammad Bader Hammami, MD; Chief Editor: Eric B Staros, MD more...
Reference Range
Interpretation
Collection and Panels
Background
Show All
Reference Range
Random growth hormone (GH) levels in a healthy person range as follows:
Men: < 5 ng/mL or < 226 pmol/L
emedicine

It is impressive to observe how such a 'seemingly' insignificant excess or deficiency in the growth hormone results in radical changes in the skeletal structure.

[28]''Well that often comes over me with overwhelming force, but at other times'' -and he shook his head vaguely, adding, ''it seems to go away.'' (Argyll, 1885, p. 244)

Dwarfism and Gigantism

Let us now take a closer a look at the adrenaline hormone which surges in times of panic, speeding up the heart rate, increasing blood flow to the muscles and sharpening mental focus. Like the growth hormone, the presence of this hormone is designed to be balanced in our blood. Using a simple mathematic equation we find that one table spoon of it could be divided amongst tens of thousands of human beings each of whom only needs a tiny accurate amount.


ScienceDirect
Adrenalin Blood Level
Joseph Feher, in Quantitative Human Physiology (Second Edition), 2012
Catecholamines Are Degraded Rapidly
The basal circulating plasma epinephrine concentration ranges from 25 to 50 pg mL−1 (=about 6×10−10 M)

God says: We have created everything in a determined measure. (The Qura'n 54:49) Indeed, teleological language is unavoidable in daily life and especially in life sciences. Biologists and medical professionals speak of the "role" and "function" of body organs (who assigned their roles and functions?), as well as genetic "codes" and "information" (who coded it and informed it?) Charles Darwin himself, often held up as a champion of atheist philosophies, was unable to convey his scientific ideas without frequent recourse to the language of design and purpose. It is natural and intuitive for us to recognize the teleology of the universe. Accordingly, the Qura'n persistently draws attention to signs in nature that demonstrate the grand design and power of the Creator. We are called to engage in thoughtful reflection upon all of these signs as a means of recognizing our purpose and attaining conviction.

3. The argument of providence:

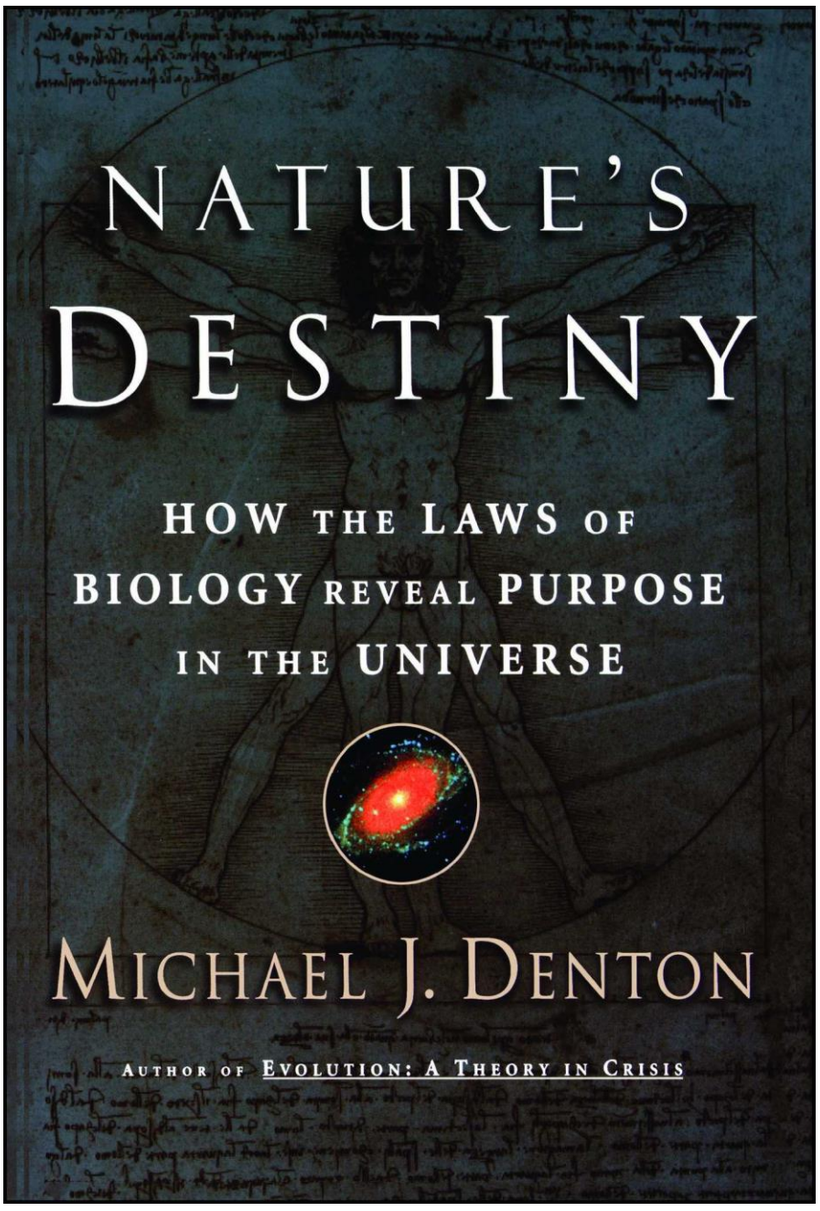
To begin with, all that occurs in the universe takes place under Divine Providence—that is, under God's sovereign guidance and control. Hence, the miraculous nature of everything inside us and around us is a reflection of how God governs creation, working all things for good. Indeed, the human body has always captivated scientists with its delicate biological fine tuning, especially the accuracy of the hormonal symphony. Besides, the Qura'n asserts that God's provisions sustain us in that everything around us performs countless services by which we benefit. For example, it urges us to consider how the food, which we regard as an ordinary thing, is created. Indeed, had God not provided the means for it, it was not in our power to have created it. Without a doubt, Man can do nothing more than to dig or plough the soil, and bury in it the seeds that God has already created and beyond this everything is done by God. God says: Then let man look at his food, (and how We provide it): For that We pour forth water in abundance,

Then We broke open the earth, splitting [it with sprouts], So, therein We caused (the) grain to grow, together with grapes and vegetables, And olives and palm trees, and gardens, full of thick trees, and fruits and pastures--(To be) a provision and benefit for you and your cattle. (The Qura'n 80:24-32)

Additionally, the instinctive and inherent disposition with which God created people is an aspect of divine providence. The Qura'n refers to this human religious nature that the Creator instilled within us as fiṭrat Allāh. Simply, it is the innate impulse within people to seek out the Divine to the point that some scientists today argue that belief in God is hardwired into our genes. This intuition and innate constitution enables us to judge good from bad and thus guides us to the right conduct and keeps us away from malevolent behavior by pricking our conscience when we sin or transgress so that we feel the urge to reform ourselves. Moreover, the prophethood is another aspect of divine providence in that God created us for a noble purpose: to worship Him alone and lead a virtuous life based on His teachings and guidance. However, one cannot fulfill this purpose without receiving clear guidelines from God. Hence, God did not leave us to wander the Earth aimlessly, but He appointed the prophets in order to inform us of our purpose and to communicate and demonstrate His message to us. In fact, all people were born to be believers in God, and the revelations of the prophets simply awaken and reinforce the disposition that is already inside us. All in all, God’s bounties are indeed countless in that He has lavished on us His blessings, outwardly and inwardly in addition to the guidance by means of the natural inclination and the prophets. Prophet Abraham (PBUH) preached that there is only One Lord of the universe whose worship is the worship of one’s own Cherisher and Supporter. He (PBUH) briefly gave the arguments as to why Allah alone is worthy of man’s worship. God reported Prophet Abraham (PBUH) as saying: They are enemies to me except the Lord of all the Worlds Who created me, and it is He Who guides me; and He gives me to eat and drink, and heals me when I am sick. (The Qura'n 42:77-80) Indeed, nobody can refute these arguments and non-believers have no rational basis for denying the existence of Allah.

Furthermore, Divine Providence refers to the subjection or subjugation of the universe for Man’s sake, that is to say everything in it is meant to benefit him. John O'keefe, the American scientist in the field of astronomy and astrophysics, says that we are ‘‘spoiled’’ because God has

made everything in the universe subservient to us.[29] Funnily enough, scientists win prizes for discoveries that only reveal these aspects of divine providence. Interestingly, Michael Denton, a famous British agnostic geneticist, lists in his amazing book *Nature's Destiny* thousands of scientific arguments about this subjection of the universe and the extraodinary precision of the cosmological parameters. This book, which has been translated and published by Markaz Baraheen, is one long argument for the biocentric fine tuning of the universe.



[29] Fred Heeren, *Show Me God*, p. 226 as cited in Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), p. 465.

Nature's Destiny is one of the books that rely upon scientific evidence to argue in favor of the universe's being designed in order to produce life, including intelligent life. Denton ambitiously presents us with a scientific version of the thesis that all things in the material universe exist for man, that is to say the cosmos is uniquely fit for life as it exists on earth and for organisms of design and biology very similar to our own species. In other words, the author amasses impressive evidence suggesting that the laws of nature are fine-tuned to enable life's becoming i.e. life and mankind are the goals to which the universe is ordered. God says: Have you not seen that Allah has subjected to your service all that is in the heavens and on the earth and has abundantly bestowed upon you all His bounties, both visible and invisible? Yet some people dispute regarding Allah without having any knowledge or guidance or any illuminating Book. (The Qura'n 31:20) In a nutshell, there are countless things in man's own body and in the world outside him, which are working in his interest, but man is utterly unaware of the means which his Creator has provided for his protection and safety, for his development and provision of sustenance to him, and for his well-being and happiness. As a matter of fact, research of man in the different branches of science is revealing many such favors of God as were hidden from him before. Without a doubt, the favors and blessings which have so far been revealed are insignificant as against those which are still hidden from man.

15. Perhaps, our spectacular universe was created by some great civilization or a physical being, why not?

Those who deny the existence of the Creator attempt to challenge the a priori premise that the universe has a definite beginning. Their argument is that the universe has always existed in an endless series of causes without the need for a first cause to set it in motion. In reality, the Muslim scholars have solved the problem of the creator of God more than a thousand years ago. Simply put, an endless series of causes necessarily leads to the non-occurrence of actions.[30] That is, it leads to the problem of infinite regress wherein each newly presumed creator of a creator is itself presumed to have its own creator. In other words, this infinite series of entities wherein each entity depends on or is produced by its predecessor is vicious and is a metaphysical impossibility. Accordingly, either this chain reaches the first, eternal and self-sustaining creator or none of these dependent and contingent beings would exist.

Let us, for the sake of clarity, use the famous analogy of the soldier and the bullet. If a soldier has to wait for an order from his commander to shoot a bullet and his commander has to wait for the order of another commander and so on to infinity, the shooting of the bullet will never take place. Similarly, if the existence of each civilization depended on the one that preceded it then none of these civilizations would ever see the light. However, since creatures do exist then, rationally speaking, there must be a self-existent creator who is the first cause. Therefore, the answer to the question 'who created God?' is that even if we accept the idea of an infinite regression for the sake of argument, despite the lack of scientific or intuitive evidence for it, that does not discount the need for a cause beyond time and space to produce and sustain it because an infinite series must still necessarily have a sufficient reason for its existence. In other words, there is a first element in the series from which all the other elements arise but which is not itself explained this way.

Hence, we can conclude thaf if an atheist gets asked ''who created the universe?'' and answers by giving the assumptions of a great civilization, a physical being or any kind of created creator, he would fall in a contradiction because actual infinities are impossible. Besides these assumptions do not solve the existential problem because a legitimate question on the part of a believer would be ''and who created that great civilization or that material being?'' Furthermore,

[30] Sultan Al-Umairi, *Dhāhirat Naqd Ad-din fi Al-fikr Al-gharbi Al-ḥadīth*, (Riyadh: Markaz Takwīn li Ad-Dirassāt wa Al-abḥath, 2018), second edition.

does the atheist have any proof or document which supports his claim? Ironically enough, atheists resort to such irrational and ill-founded assumptions, yet they dare to find fault with the religious discourse which is compatible with science and consistent with logic.

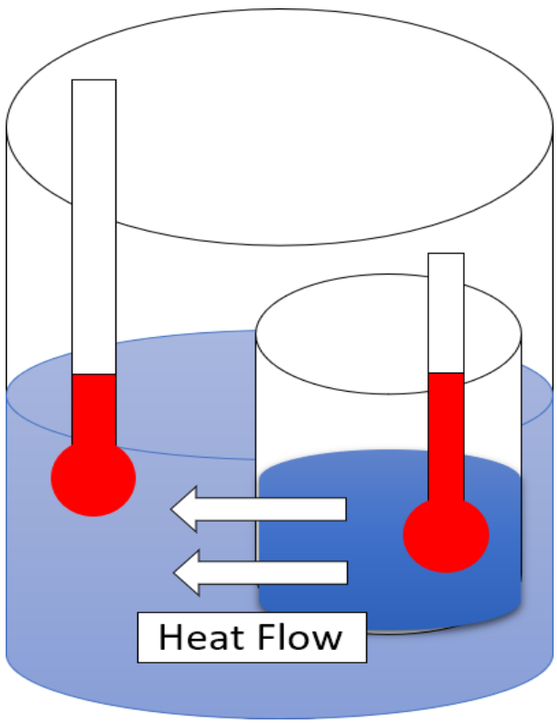
Assuredly, the religious answer to the existential question is based on both revelation and reason. Hence, it enjoys the support of the religious text which was conveyed by the prophets i.e. the bearers of revelation who were supported with miracles to confirm the validity of their message. Moreover, the religious argument possesses the authority of non-objection, that is to say atheists do not have knowledge with certainty, as they only assume that the universe was created by a great civilization or a material being without any demonstrable proof with them to verify it. Furthermore, the religious answer is consistent with the findings of modern science as regards the beginning of the universe in that scientists agree that the entities that were the "starting point" of the universe did not necessarily exist. Thus, if the universe arose from 'nothing', then how could there be a material thing that created it? From the foregoing it is obvious that, based on revelation, reason and science, there is absolutely no argument in favour of the non-existence of the Creator.

Funnily enough, in spite of all their irrational incoherent assumptions, atheists are putting us on the path to prove the existence of the Creator against their will, because they will either accept the self-existent and self-sufficent Creator, or fall into the trap of an infinite regression. Therefore, they can not eliminate or escape God, but they merely postpone proving Him one step to the back. Obviously, the atheists have a worldview without a strong foundation in evidence and logic and much of their momentum as a movement involves misrepresentations and assumptions as God says: Tell them: 'Have you any sure knowledge that you can produce before us? In fact you are only following idle fancies, merely conjecturing.' (The Qura'n 6:148) Actually, they deem such a hypothesis a smart solution because they simply hate the religious discourse which provides the conclusive argument for the existence of God and a complete refutation of their allegations, and are disgusted with it. God says: And when Allah is mentioned alone, the hearts of those who do not believe in the Hereafter shrink with aversion, but when those [worshipped] other than Him are mentioned, immediately they rejoice. (The Qura'n 39:45) This confirms that the problem of atheists is purely psychological and has nothing to do with reason and science. Indeed, whether we like it or not, submission to God—the One Creator Who subjects everything to His command—is the end of the story of human destiny. The ultimate truth and the answer to the biggest existential problem is that God created the universe, that is

why the name of the religion of Islam is not derived from its laws, regulations, or prohibitions, but from something that encompasses and surpasses all these: the truth of complete submission to God.[31] We pray Allah to grant us the total submission to adhere to His commands and prohibitions.

16. Did the Big Bang break the laws of thermodynamics?

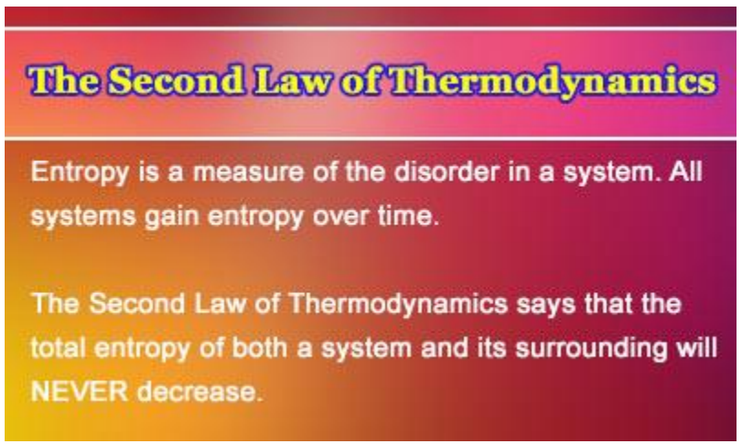
Since scientists first proposed the Big Bang theory, many people have questioned and criticized the model. Proponents of this theory argue that at the earliest moments of the big bang, all of the matter, energy and space they could observe were compressed to an area of zero volume and infinite density which cosmologists call a singularity. In fact, critics of the Big Bang theory argue that it violates the principle called conservation of energy, which is one of the most cherished laws of physics. The first law of thermodynamics states that a body can only gain or lose heat by taking it from, or passing it to, its environment or another body, because energy can neither be created nor destroyed. For example, if we bring a cup of hot water into a room the heat will transfer from this cup to the room over time until the temperature of the cup is equal to the room temperature. In fact, thermal energy is always transferred from matter with a higher temperature to matter with a lower temperature.



Skeptics ask: how can the first law be reconciled with the Big Bang's creation of matter/space-time and its energy? And how can the death of the universe ever happen? Surely, that means energy will eventually be destroyed which the first law says can never happen. Moreover, some

[31]Ali Ezzat Bigovich, *Islam between East and West*, (Cairo: Dār Ash-shuruq li An-nashr wa At-tawzi', 2013).

critics say that the formation of stars and galaxies violates the law of entropy**.** The second law of thermodynamics says that the entropy of a closed system must either increase or stay the same i.e. it cannot decrease. In technical terms, it is the measure of a system's thermal energy per unit temperature that is unavailable for doing useful work. In other words, the amount of entropy is a measure of the molecular disorder or randomness of a system because work is obtained from ordered molecular motion.


The Second Law of Thermodynamics
Entropy is a measure of the disorder in a system. All systems gain entropy over time.
The Second Law of Thermodynamics says that the total entropy of both a system and its surrounding will NEVER decrease.

Again skeptics ask: hasn't order increased and thus the entropy decreased, and since the universe is a closed system, hasn't this violated the second law? In a word, it looks as though either thermodynamics has to go or the Big Bang has to go. However, the supposed problems with the Big Bang theory disappear under close examination.

To begin with, proponents respond to those who claim that the very idea of a Big Bang violates the first law of thermodynamics that the laws of science break down anyway as we approach the creation of the universe. Hence, there is no reason to believe that the first law of thermodynamics would apply. Besides, the Big Bang does not address the creation of the universe. In other words, it does not attempt to explain what initiated the creation of the universe, or what came before the Big Bang, or even what lies outside the universe. So, given that time and space as we understand them began with the Big Bang, the phase ''before the Big Bang'' is as meaningless as ''north of the North Pole.'' In simple terms, the law of conservation of energy is not related to the origin of the universe because it is concerned with how the universe works only i.e. the flow of energy in an isolated thermodynamic system.[32] Moreover, atheist scientists believe that the total energy of the universe is equal to zero. Therefore, the law of energy conservation is not violated in any way as the famous atheist physicist Sean Caroll affirms: ''the Big Bang does not break any of the laws of thermodynamics. The two big ones are the first law

[32] Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), first edition, p. 416.

and the second law. The first law basically says that energy is conserved. We don't know if the Big Bang was the beginning of the universe or not. But if the universe has zero total energy, which is possible then the Big Bang could have been the beginning of the universe and it could have been just the first moment in the history of the universe without violating the conservation of energy because energy is zero.''[33]

Additionally, the Big Bang seems, at first glance, to violate the second law in that it starts off as a dense almost perfectly homogeneous gas (thus at almost maximum entropy) and then seems to separate into clumps that formed stars and galaxies. However, the second law of thermodynamics is considered to be inviolate on a macroscopic scale. The solution here is that because the universe is expanding it keeps getting shifted out of equilibrium. According to cosmologists, in the drive to reach a new equilibrium state, we can get pockets of order occurring without violating the second law, because the maximum allowable entropy also keeps increasing. Thus, even if the initial universe was at maximum entropy for its size, as the universe expands its entropy can increase while still being easily able to accommodate the increasing order we see. In fact, calculations done assuming that there exist ten planets per star, 100 billion stars for every galaxy and 100 billion galaxies (which are our best current estimates) show that the ordering of the planets produces changes in entropy of only one part in 10^{11} of the total current entropy. Pro-Big Bang scientists summarize the situation by asserting that no violation of the second law of thermodynamics was required to produce the universe.

The problem for the atheist is to explain how the universe could have started out in a highly ordered state. Obviously, the finely-tuned early conditions of the universe cannot be a lucky accident. Again, the universe is an isolated system and the implication, scientists argue, is that the universe must ultimately suffer a heat death also known as a thermal death as its entropy progressively increases toward a maximum value and all parts come into thermal equilibrium at a uniform temperature. Thus, after that point, no further changes, involving the conversion of heat into useful work, would be possible. In conclusion, if energy were eternal, there would be infinite entropy and the universe would have 'been born dead'. Conversly, the universe appeared with the absolute minimum of entropy as the atheist physicist Sean Caroll says: ''the second law says that entropy increases, that is the disorderliness and disorganizations of things increases over time. The second law about entropy increase is an interesting case because near the time of

[33] Https://www.youtube.com/watch?v=TGs4C60FR6833 (00:42—00:49)

the Big Bang entropy was very very very low, that's why it has been increasing for the past fourteen billion years. So that doesn't violate the second law. The question is why did the Big Bang have such a low entropy and the answer is nobody knows. This is an open question for cosmology: why was the condition near the big bang so special and so organized?''[34] It is clear from Sean Carroll's words that he is amazed with the fact that the conditions of the early universe were exquisitely fine-tuned for life. In fact, some atheist scientists, including Caroll, put forth the many-universes hypothesis to explain away the high degree of initial order of our universe. They claim that given enough universes, eventually one will arise that is ordered and in which intelligent life occurs, and so it is no surprise that we find ourselves in an ordered universe. The problem with this explanation is that it cannot account for the improbable initial arrangement of matter in the universe required by the second law of thermodynamics. Unquestionably, it is unlikely for the whole universe to be ordered because it is overwhelmingly likely that the universes in which intelligent life occurs will be ones in which the intelligent life will be surrounded by a small patch of order necessary for its existence, but in which the rest of the universe is disordered. Consequently, even under the atheistic many-universes hypothesis, it would still be enormously improbable for intelligent beings to find themselves in a universe which is highly ordered throughout such as ours. Oddly enough, many atheists insist that the universe is not orderly and that energy is eternal, but such claims are insconsistent with the findings of modern science and will never deter us from inferring the existence of God.

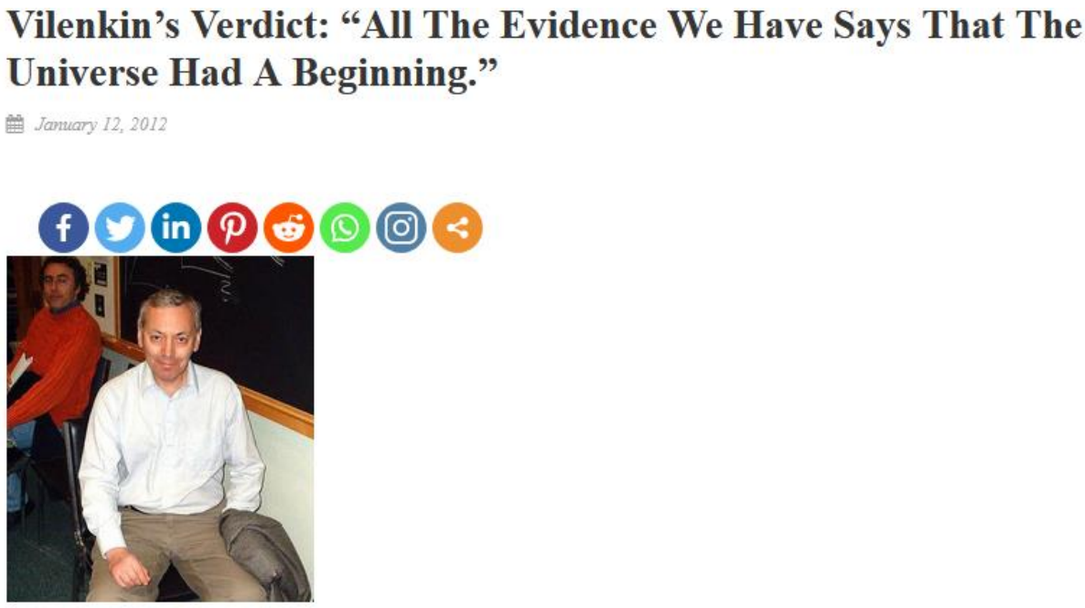
17. Is energy eternal?

Some atheist scientists put forth many theories to prove that energy has always existed (eternal) and that it will last forever (infinite), but all theses theories are scientifically invalid as the prominent atheist physicist Alexander Vilenkin admits: ''there is no single satisfactory model for a universe without a beginning.''[35]Vilenkin, who for many years has been trying to transcend the fact that the universe had a beginning, listed all the models and hypotheses that scientists put forth in favour of their thesis that the universe is eternal, then he bitterly confessed: ''I will tell you my comment. I have come to the conclusion that there is not a single working model or hypothesis amongst all the models presented. There is no model that can avoid the fact that the

[34]Https://www.youtube.com/watch?v=TGs4C60FR6833 (00:49—01:16)

[35] Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), first edition, p. 417.

universe has a beginning.''[36] In conclusion, all the evidence that scientists have says that the universe had a begining.



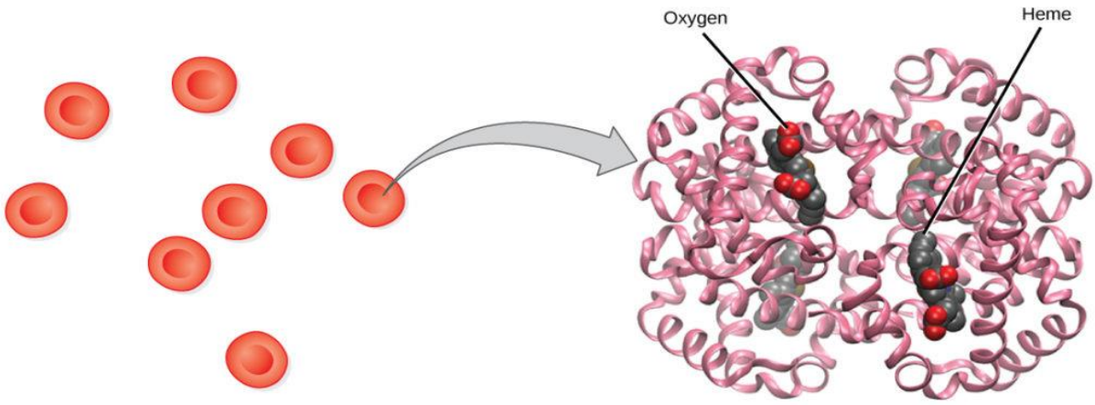
All in all, atheists relentlessly claim that there is a scientific possibility that the universe is preceded by such-and-such or such and that we could escape the beginning of the universe with such or such. In other words, they always try to attenuate the strength of the evidence for the existence of God with some useless sophistries and hypotheses. Certainly, atheism is the last superstition and atheists' claims will always be mere sophism, while religion remains consistent with science and axioms.

18. If God created the universe then why did He make it so big (all the stars and planets)?

This misconception is rooted in atheists' tendency to anthropomorphize God, that is to say they ascribe human features to Him—exalted is He and high above what they say by great sublimity. It is assumed, due to the lack of resources, that Man should spend the least amount available to achieve the best result. Atheists therefore ask: why is the universe so huge? Quite simply, if God created billions of billions of universes, each one of them in the size of our universe, that would not exaust His treasuries. In truth, His creation is a reflection of His infinite power and wisdom. Now a more pertinent question would be: are these planets and stars useful for us? Firstly, we are not alone in the universe. God says: And from among His Signs for Him to create the heavens and the earth, and to multiply and spread the animals in there. (The Qura'n 42:29) Besides, not knowing the benefit of something does not mean that it is useless. Actually, the most common elements, like carbon and nitrogen, are created in the cores of most stars, fused

[36]Https://www.youtube.com/watch?v=NXCQelhKG7A (2:41—3:35)

from lighter elements like hydrogen and helium. However, the heaviest elements, like iron are only formed in the massive stars which end their lives in supernova explosions, and other elements are still born in the extreme conditions of the explosion itself. Definitely, without supernovae, life would not be possible. For example, our blood has iron in the hemoglobin which is vital to our ability to breathe.



We also need oxygen in our atmosphere to breathe and nitrogen enriches our planet's soil. In short, supernovae make elements and scatter them i.e. the elements that are made both inside the star as well as the ones created in the intense heat of the supernova explosion are spread out in to the interstellar medium. These are the elements that make up stars, planets and everything on Earth including ourselves. Indeed, except for hydrogen and some helium created in the Big Bang, all of the stuff we, and the Earth around us, are made of, was generated in stars, through sustained fusion or in supernova explosions. Hence, Earth itself would be a very different place without the elements created in stars and supernova explosions.

Most importantly, the inertia, which is balanced on a razor's edge and without which matter would lack the electric forces necessary to form its current arrangement, is the product of the mass of the universe as a whole. We learn the principle of inertia early on in life in that we all know that it takes a force to get something moving, to change its direction, or to stop it. Therefore, our intuitive sense of how inertia works enables us to exercise a degree of control over the world around us. Quite simply, without external physical forces, a car would keep moving in a straight line in the same direction. Also, it takes a force (energy) to get a car moving and overcome the inertia that kept it still in a parking space. Besides, changing direction to round a corner or make a U-turn requires further energy. Also, inertia is why a car does not stop the moment the brakes are applied. Likewise, think of what happens if you were driving a car and you are not wearing your seat belt and the car abruptly stoppped. You would continue in motion

(your body would thrust forward) due to the tendency of moving objects to continue in motion. Interestingly, calculations indicate that if the force of inertia were slightly weaker, the slightest breeze of air would move rocks, and in such a world we would constantly be exposed to the bombing of all kinds of things. And if it were slightly stronger, we would not be able to even move our fingers.[37] Indeed, inertia is the force that holds the universe together without which things would literally fall apart to the extent that scientists say that if it were possible to flick a switch and turn off inertia, the universe would collapse in an instant to a clump of matter.

Surprisingly, physicists discovered that the mass of the Milky Way, the galaxy that contains our solar system, participates in controlling inertia at a rate of 0.1 per million, while the mass of the Earth does not control inertia except by 0.001 per million.

In a nutshell, without the law of inertia, which guarantees that particles do not shoot off at high speeds, life would probably not be possible. As a matter of fact, the ideal inertia through which we exercise all our activities is a product of the total energy of the universe. God says: And We did not create the heaven and the earth and that between them aimlessly. That is the assumption of those who disbelieve so woe to those who disbelieve from the Fire. (The Qura'n 38:27) Undoubtedly, science is revealing more aspects of the extraordinary fine-tuning of the cosmos, which is offering by far the most persuasive current argument for the existence of God.

19. How can humans with their small size be at the center of this gigantic universe?

Over the last few decades, a new way of arguing for atheism has emerged in that new atheists claim that the spatial and temporal size of the universe gives them reasons to be atheists

[37]Denton Michael, *Nature's Destiny: How the Laws of Biology Reveal Purpose in the Universe*, (New York: The Free Press, 1998).

on the grounds that our minuteness compared to the vastness of the universe makes us insignificant. Simply put, their central contention is that we possess no value because we are so small and the universe is so vast. By analogy, one would deny a farmer ownership of his farms just because the farms are vast and he is too small in comparison with them.

However, it is absurd to think that size matters in itself. Rather, there is an important sense on which we clearly are of immense cosmic significance and even universally central. In fact, the argument is embarrassingly simple: we possess value whilst nothing else in the universe does, and when something possesses intrinsic value, how could the size of the universe affect its value in any way? Moreover, we are the only beings that understand and strive for morality in that saving the life of one child, for instance, is more important than all the mountains of the earth, is it not? Analogously, think of a king who writes a book of recommendations for his son. If someone objected saying that a king who owns millions of acres of lands should not care for his son whose size is so insignificant in comparison with his lands, would such an objection be rational? And to Allah belong the finest attributes. Indeed, there is no reason to 'worship' mere size, for did not this universe, as every physicist admits nowadays, start from a point billions of times smaller than a pinhead? In truth, such claims are, as we have explained earlier, the result of atheists'anthropomorphization of God—that is humans tend to estimate things according to how much they invest on them wherefore atheists assume that the center of this gigantic universe must be something immensely big in proportion to how much resources were put (by God) into its making.

But, are we really at the center of this universe? Yes, we are through the Divine Mandate (takleef) and the Trust (amāna) that man undertook to bear. In Islamic spiritual terms, this is because God took a primordial covenant with every person before the world was created that they would recognize their Creator and abide by His will. In fact, this mandate is the greatest trial assigned to Man by virtue of his being the only creature of God capable of understanding its

meaning. In other words, Man was given the freedom to choose between obedience and disobedience, and was granted authority over countless creations wherefore he is held responsible for his voluntary acts. Hence, whether we like it or not, we feel this mandate and know that we are concerned with it, which is the reason why believers and atheists alike suffer the stings of moral conscience owing to the innate inner call to ‘‘do and not to do’’, that is to be good and not to be evil. In short, we all know that we are accountable (before God) and we will be judged on the Day of Reckoning.

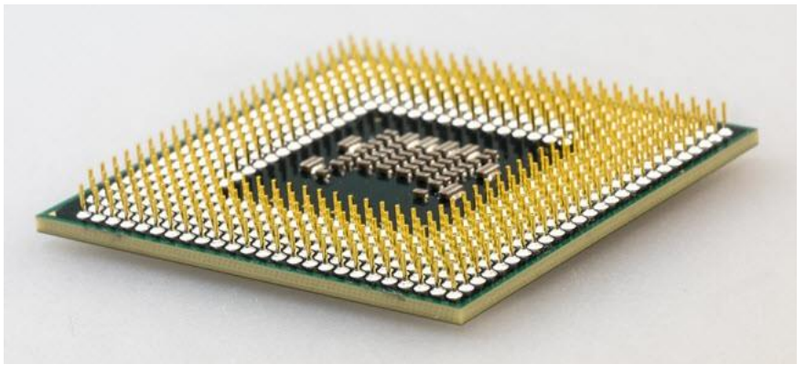
Additionally, we are at the center of the universe because we uniquely possess the attributes of intelligence and sentience that more generally confer value on the beings that possess them. Actually, such attributes allow us to be fully aware of the reality of our existence and the magnificence of the divine providence and the perfection characteristic of all creation in the universe. God says: We offered the trust to the heavens and the earth and the mountains, but they refused to carry it and were afraid of doing so; but man carried it. Surely he is wrong-doing, ignorant. (The Qura'n 33:72) In order to give an idea of how important and heavy this “trust” is, Allah says that the heavens and the earth, in spite of their glory and greatness, and the mountains, in spite of their size and firmness, could not have the power and courage to bear it. But man, the weak and frail man, has borne this heavy burden on his tiny self. Hence, man can judge exactly what delicate position he holds in the universe by imagining this scene through his heart’s eye.

20. Is it true that our universe is just one lucky draw from the hat of a vast number of universes all with very different physical properties?

In response to theistic explanation of fine-tuning of the cosmos, many atheists have offered the multiverse hypothesis as an alternative explanation. According to this atheistic many-universes hypothesis, there are a very large–perhaps infinite–number of universes, with the fundamental parameters of physics varying from universe to universe. They claim that the parameters of physics would not have life-permitting values in the vast majority of these universes, whereas they would in a small proportion of them, and consequently it is no longer improbable that universes that are fine-tuned for life to occur such as ours exist. However, the fact that Earth is the only planet known to support life amongst countless other planets does not in any way diminish the significance of the argument of its perfection, for this perfection is not the result of the mere availability of raw materials. Let’s first illustrate and support this principle,

and then apply it to the case of the fine-tuning. Surely, a bowl of cooked delicious food will not suddenly appear in front of me just because I am in a forest full of vegetables, fruits and animals.

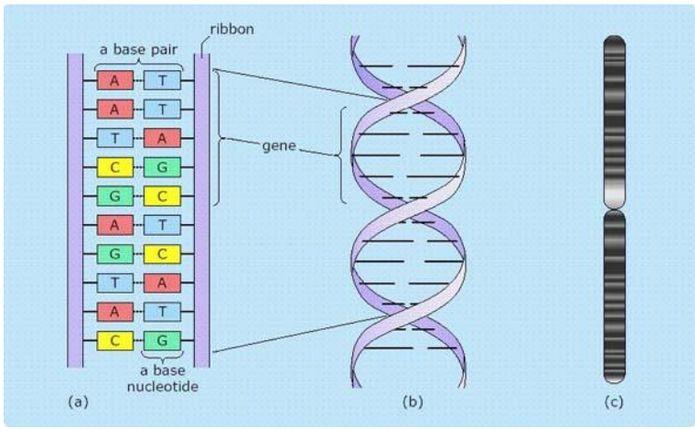
Likewise, we can not find the digital processors and electronic chips, which are made of sand, everywhere around us just because sand is abundantly available in the deserts of the world.



Unquestionably, creation is not solely a matter of raw materials' availability. But, the inherent perfection of Earth is the result of the Divine know-how. To answer atheists' question, the existence of an infinite number of planets will never account for the emergence of a planet with such perfection, especially its single most impressive characteristic i.e. life. God says: It is the work of Allah, who perfected all things. (The Qura'n 27:88) Moreover, the fact that Earth hosts not just life, but intelligent life, makes it doubly unique. In fact, when physicists and mathematicians entered the field of molecular biology, scientists discovered that the complete pattern of the future development of an organism and its function when mature is contained in the chromosomes in the form of a 'code' which allows molecules in cells to carry information. Without a doubt, the discovery of the structure of the DNA was a revolution in modern science.

DNA is the chemical compound that contains the instructions needed to develop and direct the activities of all living organisms. DNA molecules are made of two twisting, paired

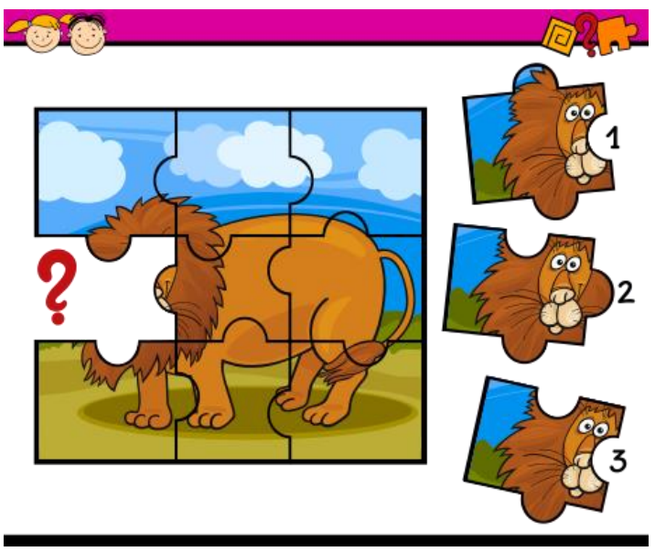
strands, often referred to as a double helix. Each DNA strand is made of four chemical units, called nucleotide bases, which comprise the genetic ‘alphabet’. The bases are adenine (A), thymine (T), guanine (G), and cytosine (C). The order of the As, Ts, Cs and Gs determines the meaning of the information encoded in that part of the DNA molecule just as the order of letters determines the meaning of a word. An organism’s complete set of DNA is called its genome. Virtually every single cell in the body contains a complete copy of the approximately 3 billion DNA base pairs, or letters, that make up the human genome. With its four-letter language, DNA contains the information needed to build the entire human body. A gene traditionally refers to the unit of DNA that carries the instructions for making a specific protein or set of proteins which make up body structures like organs and tissue, as well as control chemical reactions and carry signals between cells. In other words, each gene is really just a recipe for a making a certain protein and as humans we are made of proteins.



Genes are often called the blueprint for life, because they tell each of your cells what to do and when to do it: be a muscle, make bone, carry nerve signals, and so on. The genes orchestrate all this by making proteins. Simply put, genes encode proteins and proteins dictate cell function. Actually, information from genes is used to make proteins through the processes of transcription and translation. The genetic code is the set of rules used by living cells to translate information encoded within genetic material into proteins. For example, in order for the liver to form in the fetus, there must be a certain number of genes that contain instructions about how the liver is formed, encoded in a coding system, and when the code is translated the liver appears. Genes carry the information that determines our traits, which are features or characteristics that are passed on to us from our parents. As we have said earlier, each cell in the human body contains about 30,000 genes which encode all its functions, that is every organ in the human body and every enzyme and hormone is encoded within its own genes. Therefore, life, in

essence, is a set of information not a substance i.e. the biological systems in all living organisms are information systems, not material systems.

Interestingly, the DNA alphabet can encode very complex instructions using just four letters which provide all the instructions needed to build any living organism. However, in order for DNA to function effectively at storing information, the information stored in it must be translated. In other words, in order for the stored information to be useful, cells must be able to access the instructions for making specific proteins, so the correct proteins are made in the right place at the right time. In layman's terms, this DNA, 3 billion characters in each cell, describes who God ordained you to be. In other words, it describes the miracle of human life, written in the mysterious language of all the ages. Indeed, scientists have the privilege of reading the text of the genome written by God in His language. We now ask atheists: Does the existence of the countless universes account for the miracles of the human genome? It is so absurd that atheists deal with the living organisms and their perfectly designed information systems with a puzzle game-like mindset. In other words, just like a player disassembles and re-assembles the puzzle pieces, evolutionary scientists try to escape the sophistication and complexity of the divine creation by coming up with simpler alternatives to explain the alleged molecules-to-man evolution.

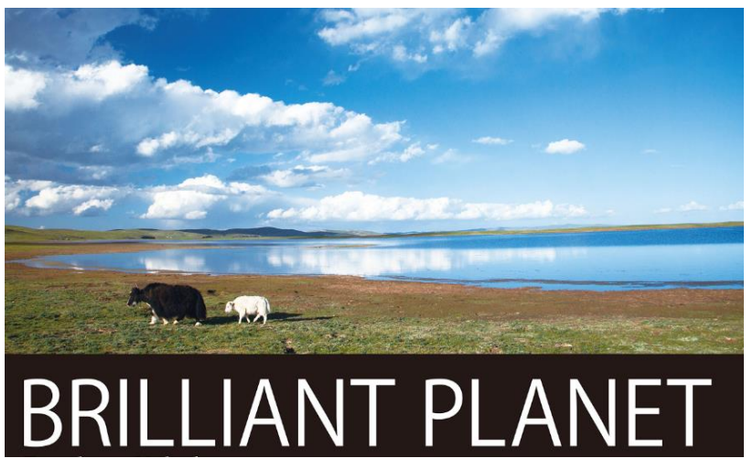


Think about it: would a carefully prepared food tray appear just because dense forests exist? Would the three billion letters inside each cell of the human body, which encode all its functions with utmost accuracy, appear simply as a result of the innumerable planets? Assuredly, the perfect workings of nature will never be explained away by these atheist fantasies because they are not merely a mindless accident or a product of blind chance, but the creation of the All-Knowing and All-Powerful Divine. Surely, the urge to understand the ordered arrangement of

the universe and the fine tuning of the informational coding-decoding systems of life, which point to the Creator, is an urgent mental need. In other words, this is the reason why the belief in this basic idea of God is universal, untaught, natural and intuitive.

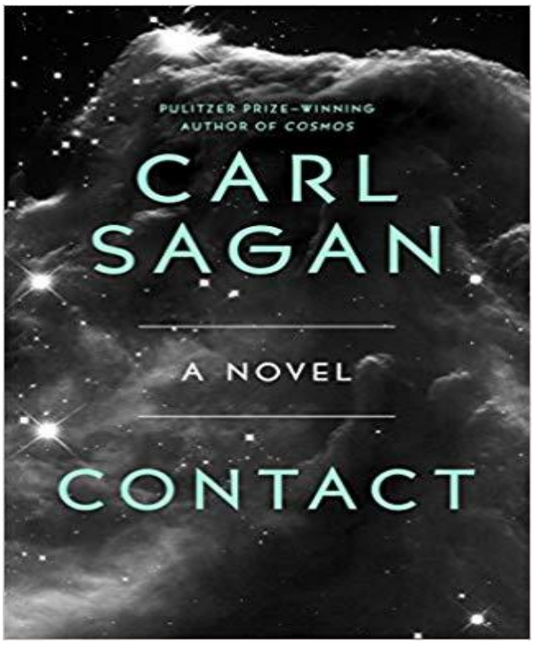
Analogously, suppose I went with an atheist on a mission to another planet and found a sophisticated device with a complex structure. What conclusion would we draw from finding this device, even if we do not understand its function yet? Would we draw the conclusion that it just happened to form by chance? This is certainly not logical. Instead, we would unanimously conclude that it was designed by some intelligent being because an intelligent designer appears to be the only plausible explanation for the existence of the device. That is, the only alternative explanation we can think of—that the structure was formed by some natural process–seems extremely unlikely.

It is noteworthy that the issue of evidence is the source of the modern conflict between science and religion in that science demands affirmative proof for what is essentially un-provable in the scientific arena (i.e. a proof that God exists). However, the evidentiary burden should instead fall on the atheists to prove that God does not exist and that there is no cosmic purpose. In other words, if an atheist is so quick to invoke science as their guiding rationale in their belief in a random universe, then they should prove it.



Otherwise, in the absence of an experiment that shows that God does not exist or a proof that concludes that the universe has no purpose, we cannot scientifically accept those assertions. As a matter of fact, objective scietists argue that it is not only intellectually dishonest but also logically inconsistent for a scientist to embrace atheism because it is impossible to conclusively determine or prove that God does not exist given that in science we can not affirmatively know or assert something until we have empirically proven it. Consequently, even the most strident atheists and harshest critics of religion admit that they can not be sure that God—and by

extension the Hereafter—does not exist. Therefore, it is irksome that some atheists use the banner of science to give legitimacy to their own dogmatic beliefs and their self-assured and unproven atheism. Funnily enough, atheists outwardly resist the perfection evidence whilst they inwardly surrender to it. The famous agnostic atheist Carl Sagan wrote a novel entitled *Contact* in which he tells the story of scientists working on the Search for Extraterrestrial Intelligence (SETI) project.



One night, the radio telescopes pick up a signal: prime numbers. The Argus scientists (in the novel), after meticulously checking for hoaxes and radio interference, confirm that the message, coming from the star system of Vega, twenty-six light years away, is extremely unlikely to be created by natural phenomena and that it definitely is from another civilization. Ironically enough, Carl Sagan, the author of the novel is a famous agnostic, yet his mind recognizes the fact that the complexity and orderliness in a short message is a proof that it was created by a great civilization. Similarly, any scientist working on the Search for Extraterrestrial Intelligence projects will be totally content with observing a signal like the massage in Sagan's novel to infer the existence of a civilization trying to contact humans. However, when it comes to the DNA, three billion letters within each cell of the human body, atheists do not deem it proof enough of the Divine's perfect creation, athough if a cell's DNA is mutated, an abnormal protein may be produced, which can disrupt the body's usual processes and lead to a disease such as cancer. Rather, they never cease to dodge in order to avoid this ultimate truth. God says: Say, ''Observe what is in the heavens and the earth.'' But of no avail will be signs or warners to a people who do not believe. (The Qura'n 10:101)

The inevitable conclusion from all this is simple, yet profound: there must be a creator of all this perfect design within ourselves and around us. In other words, there are signs of God in everything that we see at every level and the more we examine these signs and think deeply about them, the more it will reinforce our conviction. Oddly enough, the physical laws uncovered by scientists reveal the perfection of the workings of the universe, yet, in spite of being the greatest advocates of scientistic materialism, atheists reject this truth supported by theoretical and experimental observation. As science has advanced considerably, scientists now recognize the consistency and universality of natural laws. In other words, the natural laws of the universe are deliberate, consistent, and united in their purpose i.e. they work together towards a common end: the creation of the world and the sustaining of life. Therefore, we can infer that there is a single intelligent force behind all of it. Ironically, science could not advance at all without assuming uniform patterns within the fabric of the universe. Interestingly, the uniformatarian principle (uniformatarianism), which refers to the spatiotemporal invariance of physical laws (the constancy in physical laws throughout space-time), is considered by most scientists as the first principle required in scientific research.

Uniformitarianism

Uniformitarianism, also known as the **Doctrine of Uniformity**, is the assumption that the same natural laws and processes that operate in our present-day scientific observations have always operated in the universe in the past and apply everywhere in the universe.

Quite simply, the very essence of a scientific explanation of some phenomenon is that the world is ordered logically and that there are reasons things are as they are. Hence, tracing the series of explanations for why things are as they are leads to the reasonable conclusion that the universe is designed for life. Ironically, modern science implicitly depends upon a monotheistic premise. Accordingly, the current consensus is that the most refined expression of the rational intelligibility of the cosmos is found in the laws of physics in that the fundamental rules on which nature runs are all expressed as tidy mathematical relationships. Hence, physicists note that the natural laws of the universe require a plausible explanation and they believe that it is simply irrational and unscientific to assume that they appeared as they are for no reason. We ask atheists: where do these laws come from? And why do they have the form that they do?

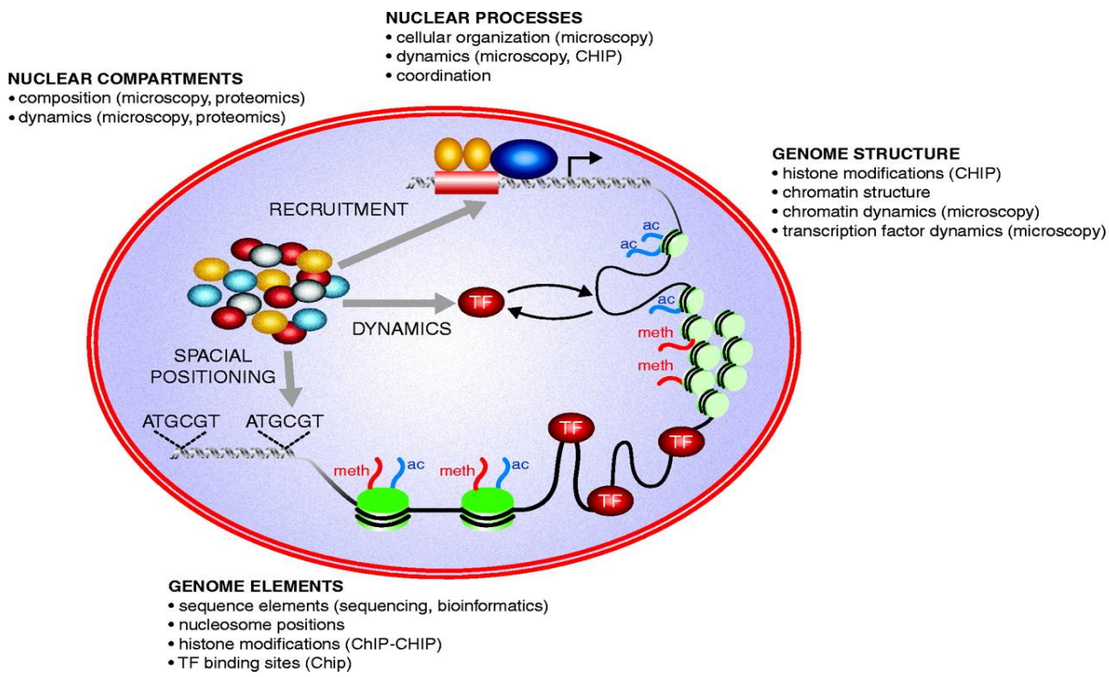
Definitely, the idea that the laws exist without reason is deeply anti-rational. All in all, God's work in nature is the primary and most powerful rational method of confirming His existence because it indicates that the universe was indeed designed. God says: It is the work of Allah, who perfected all things. (The Qura'n 27:88) He also says: Exalted is God Who has perfected everything He created. (The Qura'n32:7) Scientists have referred to this as the finely-tuned universe or the anthropic principle which means that the laws of nature are configured in such astonishingly precise measurements in order for the universe to exist and for life to thrive. In other words, each of the forces and phenomena of the universe are balanced in a way that produces the wondrous universe in which we live. Thus, it is hardly rational to assume, without hard evidence, that all of these natural laws, with every miracle that they produce, appeared without cause or purpose.

21. What is the origin of the genetic code? How is genetic information encoded in DNA?

Genetic code is the term used by scientists for the instructions in a gene that tell the cell how to make a specific protein. A, C, G, and T are the ‘‘letters’’ of the DNA code; they stand for the chemicals adenine, cytosine, guanine, and thymine, respectively, that make up the nucleotide bases of DNA. In other words, it is the way that the four bases of DNA (the A, C, G, and Ts) are strung together in a way that the cellular machinery, the ribosome, can read them and turn them into a protein. Each gene's code combines the four chemicals in various ways to spell out three-letter ‘‘words’’ that specify which amino acid is needed at every step in making a protein.

Everything that makes up your body requires genetic information. In simple terms, you have hands and feet because your genes code for them and the same is true for all creatures. In technical terms, all living organisms are identical from the point of view of the molecular foundations of genetic coding of sequences of amino acids in proteins. The genetic code is stored as a linear, non-overlapping sequence of the nitrogenous bases: Adenine, Guanine, Cytosine and Thymine. The genetic information is recorded in DNA using different sequences of

these four nitrogenous bases, which are the ‘‘alphabet’’ of letters that are used to write the ‘‘code words.’’ The American mathematician Nerbert Wiener says: ‘‘information is information. It is neither matter nor energy.’’ Virtually, every single cell in the body contains a complete copy of the approximately 3 billion DNA base pairs.



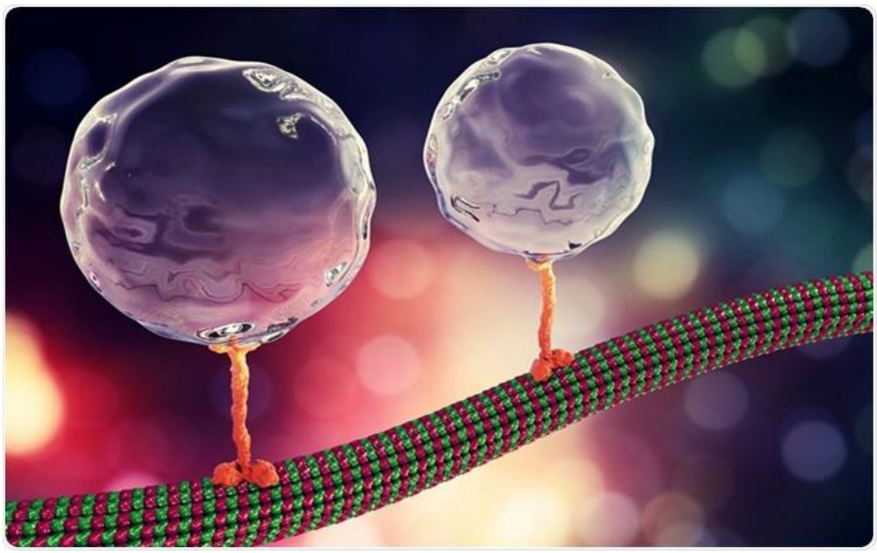
The mystery of where the genetic information came from has puzzled scientists for decades, especially that scientists discovered that information is the essense of the whole universe. Paul Davies, the famous agnostic physicist says: ‘‘scientists admit, behind closed doors, that they are perplexed about the impressive informational life system. They are concerned about this topic which will open the door to creationists because the informational life system means creation.’’[38] The second problem in this regard, as Paul Davies puts it, is that: ‘‘if scientists admit ignorance—not knowing where the information system came from, according to the materialistic view, they will lose their funding.’’[39] Indeed, the origin of this incredible information system is a biological enigma for every materialist thinker. Leslie Orgel, one of the most prominent cosmologists in the world, commented in one of his lectures about this dilemma: ‘‘I hope that there are no creationists amongst the audience.’’[40] Naturally, all advocates of

[38]Davies Paul, *The Fifth Miracle*, p. 17-18 as cited Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), p 580.

[39] Ibid.

[40]Orgel Leslie, ‘‘*The RNA World and the Origin of Life*’’, Lecture, ISSOL, 2002, 40 as cited in Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), p. 584.

materialism realize this dilemma and anyone who denies it is definitely choosing willingly to ignore the religious implications of this matter. Most strikingly, some atheist scientists, especially non-biologists, are still approaching this issue with the mentality of the nineteenth century. Arab atheists, for example, try to downplay the impressive information system that exists inside every living organism by arguing that: ‘‘there are primitive cells and complex cells.’’ In fact, this claim is an old superstition because all cells are impressive, and there is not a single cell without an information system.[41] Unquestionably, the genetic code of unicellular organisms has the same extraordinary accuracy and complexity found in multicellular organisms. Basically, the same amazing devices and machines are found inside the cell of any organism, whether it is unicellular or multicellular. Look at the organelle in the picture below.

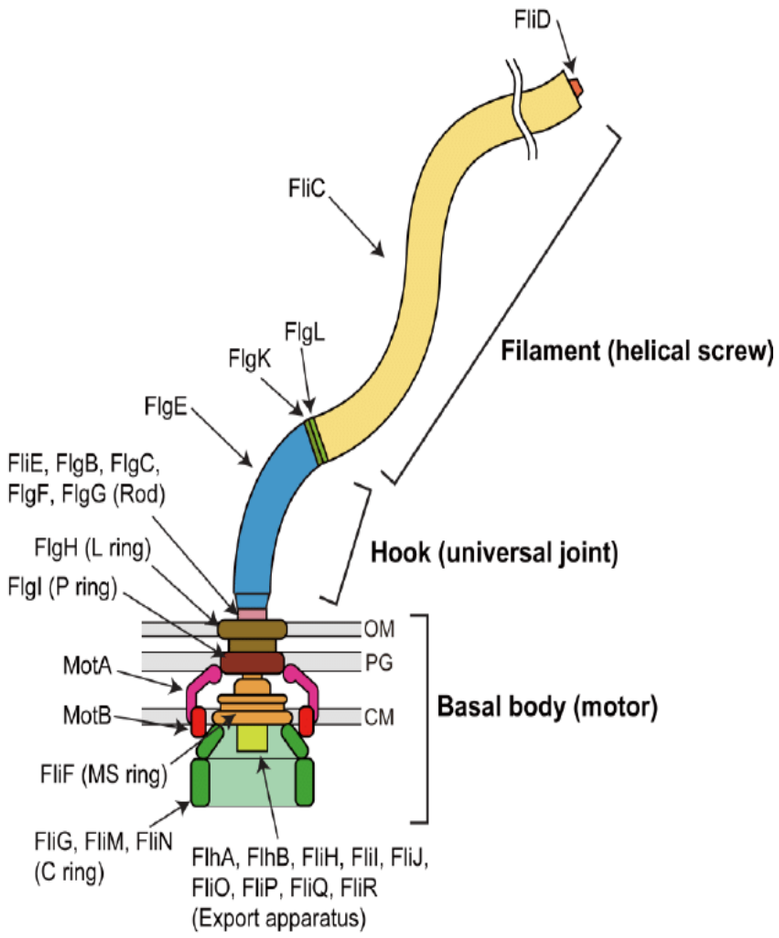


A kinesin is a protein belonging to a class of motor proteins found in eukaryotic cells. Most kinesins walk towards the plus end of a microtubule, which, in most cells, entails transporting cargo from the center of the cell towards the periphery. It has real legs and hands and transports components, which exceed its weight by many times, outside the cell following the paths designated for it. It even seeks aid from other kinesins when it stumbles or finds an unpaved path. It is worth mentioning that kinesin is only one in thousands of incredible machines in each DNA cell wherein fifty cells put together would not amount to the size of the full stop punctuation mark (.).

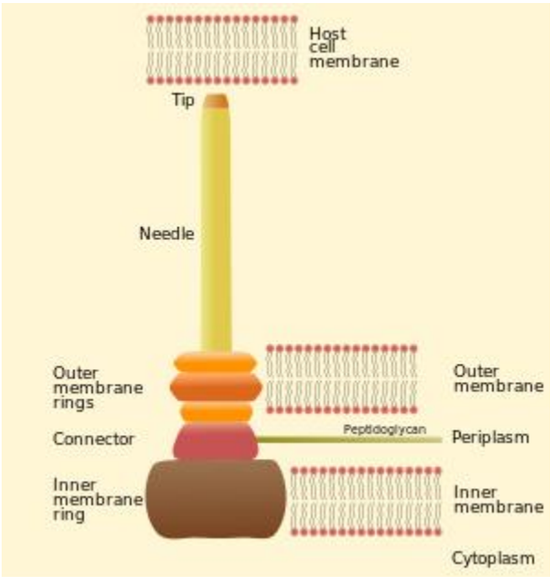
Moreover, the bacterial flagellum, with its complexity of structure and multiplicity of function, is a mind boggling machine found in unicellular bacteria which atheists consider primitive cells. This machine self-assembles as it propels as it responds; that is, the flagellum not

[41]Monid Jacques, *Chance and Necessity*, (New York: Penguin Random House, 1988), p. 134

only pushes the cell along, it also responds to intracellular signals and it assembles itself. It is composed of about 30 different proteins with copy numbers ranging from a few to a few thousands. Actually, it is made by self-assembly of those proteins and it would not be formed if one of these proteins was displaced or missing. The flagellum spins, driven by a rotary motor, the size of which is 1/100.000 of an inch, at speeds of over 100,000 rpm, and is able to reverse its direction of movement in 1 /40 000ths of a second (25 microseconds).



Ironically, according to mathematical calculations, the probability of the emergence of the bacterial flagellum by chance is 10 to the power of 1170 (10^{1170}), whereas the number of atoms in the entire universe does not exceed 10 to the power of eighty (10^{80}).



Faced with this miracle, the advocates of materialism claimed that the bacterial flagellum was a brilliant evolution of the Type III secretion system. Ironically, they are trying to explain away an impressive system with another equally incredible system. Darwin defenders have offered assortment of ineffectual replies, again and again. They claimed that they found one main flagellar component (i.e. the injectisome) that can function outside the flagellar system and that this refutes irreducible complexity. Quite simply, they argued that the protein machinery used to assemble the proteins that make up the injectisome is identical to that used to assemble the 'propeller' part of the flagellum motor, and that nine core proteins of the flagellum motor share common ancestry with injectisome proteins (i.e. the genes that code for them are so similar they have clearly come from the same genetic ancestor). However, creationists refuted atheists' unconvincing objections by offering their argument for intelligent design based on irreducible complexity. They proved that the Type III Secretory System (T3SS), basically a pump that's used to transport proteins across the cell membrane of bacteria, cannot be a precursor to the Bacteria Flagellum because it appeared after it.[42]

The injectisome is just a molecular pump used by certain predatory bacteria to inject toxic proteins into eukaryotic cells, and the T3SS is only part of the pump that is used during flagellar assembley, which then also serves as the basal body that anchors the flagellum in the cell membrane (i.e. it is not actually part of the motor portion of the flagellum). Additionally, it is not the case that the injectisome's proteins are identical to the flagellar motor. In fact, creationists are quite willing to grant that some proteins between the T3SS and the flagellum appear

[42]Sophie S. Abby and Eduardo P. C. Rocha, *an Evolutionary Analysis of the Type III secretion system*, 2012 as cited in Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), p. 612.

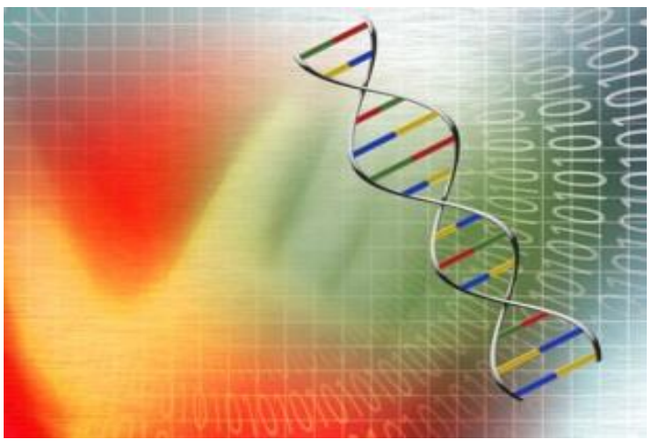
homologous, but it is certainly not correct to call them identical. Research suggests that a flagellar protein (FliK) and a protein from the T3SS (YscP) are homologous because, across a stretch of about 58 amino acids within their 300 or so amino acids, 13 residues are identical in at least 50 percent of the proteins studied, and another 23 amino acids within that stretch have similar chemical properties. That means that less than 25 percent of the amino acids are identical across a stretch that represents less than 20 percent of the total protein. Obviously, while the proteins are clearly similar, perhaps very similar, and probably homologous, it's misleading to say they are "identical."

Furthermore, it does not really matter even if we say they are identical. Actually, even if we grant that nine of the proteins in the T3SS of the injectisome are identical to the proteins of the T3SS used by the flagellum this will not constitute an evolutionary explanation for many reasons. First, the sequence similarity can at most establish, as intelligent design advocates put it, that they have clearly come from the same genetic ancestor. But, they are quick to remind us why establishing common ancestry is different from establishing a Darwinian explanation. Quite simply, although comparing sequences is useful for determining lines of descent, it cannot show how a complex biochemical system achieved its function. That is, though the evidence strongly supports common descent, the root question remains unanswered: what has caused complex systems to form? Oddly enough, modern Darwinists point to evidence of common descent and erroneously assume it to be evidence of the power of random mutation. Second, it is doubtful that the T3SS is useful at all in explaining the origin of the flagellum because the injectisome is found in a small subset of gram-negative bacteria that have a symbiotic or parasitic association with eukaryotes, and since eukaryotes evolved over a billion years after bacteria, this suggests that the injectisome arose after eukaryotes. However, flagella are found across the range of bacteria, and the need for chemotaxis and motility (i.e. using the flagellum to find food) precedes the need for parasitism wherefore scientists expect that the flagellum long predates the injectisome. Indeed, given the narrow distribution of injectisome-bearing bacteria, and the very wide distribution of bacteria with flagella, parsimony suggests the flagellum long predates injectisome rather than the reverse.

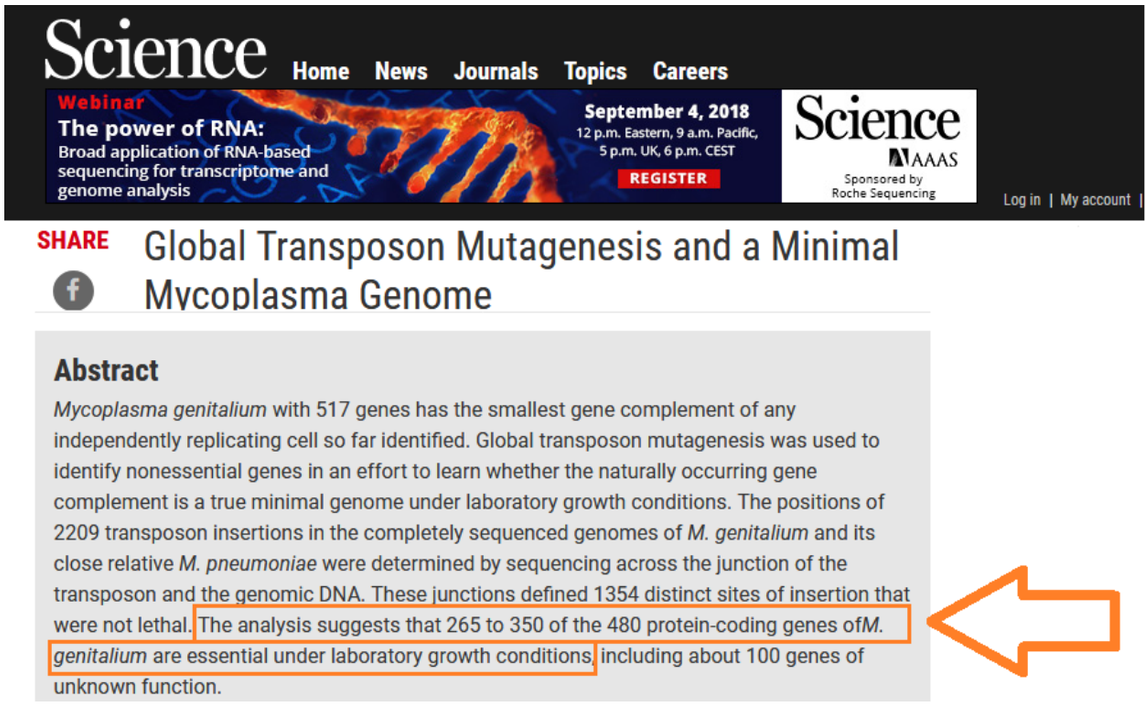
Now, under normal evolutionary reasoning, one would take this kind of phylogenetic evidence to indicate that the flagellum long predates the T3SS, and that the T3SS is in no way a precursor (or closely related to a precursor) of the flagellum. However, we should never expect evolutionists to use their normal reasoning when trying to oppose potent arguments for

intelligent design. Here, they reject standard phylogenetic concepts like parsimony and assume that somehow the T3SS is (or is very similar to) some kind of a flagellar precursor, though normal evolutionary analysis would absolutely reject that hypothesis. Additionally, it is interesting that flagellar genes are always present whenever injectisome genes are present. Thus, the injectisome is always found with the flagellum, but not vice versa. Again, this implies the injectisome has an origin that postdates the flagellum, and that it may even be derived from the flagellum. So the evidence strongly suggests that the injectisome (or something like it) did not predate the flagellum, and thus can not help explain how the flagellum evolved. Finally, there's the fact that the function of the T3SS (whether in the injectosome or in the flagellum) really has nothing to do with explaining the propulsion function of the flagellum in that the T3SS is just a pump that can move proteins across the cell membrane. Hence, it doesn not in any way explain how the flagellum motor and its core propulsion function arose.

Let us now clarify an important concept in biology called the minimal-gene-set in order to completely eliminate the hypothesis which states that there are primitive cells and complex cells. Simply put, the idea of a minimal gene set refers to the smallest possible group of genes that would be sufficient to sustain a functioning cellular life form under the most favorable conditions imaginable, that is to say in the presence of unlimited amounts of all essential nutrients and in the absence of any adverse factors, including competition.



These genes encode for energy which is prerequisite for life as well as all functions essential to it, namely food and reproduction. Several theoretical and experimental studies have endeavored to derive the minimal set of genes that are necessary and sufficient to sustain a functioning cell under ideal conditions (i.e. in the presence of a full complement of essential nutrients and in the absence of environmental stress).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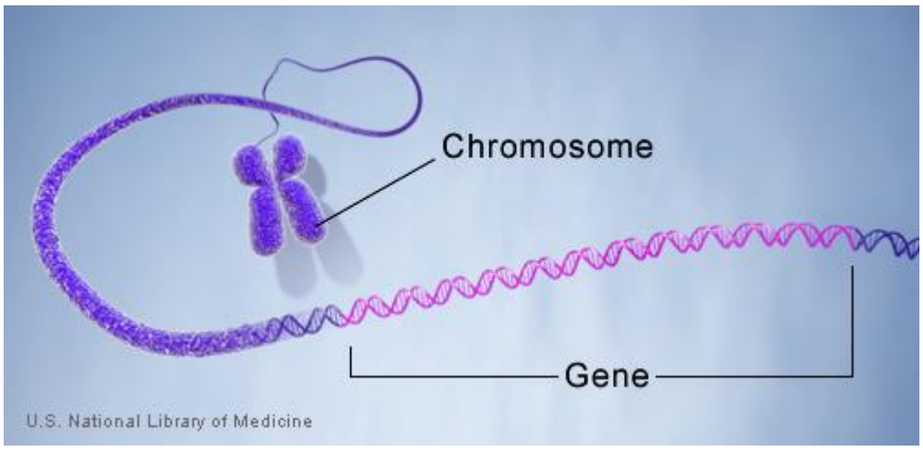
Global Transposon Mutagenesis and a Minimal Mycoplasma Genome
Abstract
Mycoplasma genitalium with 517 genes has the smallest gene complement of any independently replicating cell so far identified. Global transposon mutagenesis was used to identify nonessential genes in an effort to learn whether the naturally occurring gene complement is a true minimal genome under laboratory growth conditions. The positions of 2209 transposon insertions in the completely sequenced genomes of M. genitalium and its close relative M. pneumoniae were determined by sequencing across the junction of the transposon and the genomic DNA. These junctions defined 1354 distinct sites of insertion that were not lethal. The analysis suggests that 265 to 350 of the 480 protein-coding genes ofM. genitalium are essential under laboratory growth conditions, including about 100 genes of unknown function.

The accumulation and comparison of multiple complete genome sequences produced a version of the minimal gene set consisting of approximately 265 to 350 genes. The Craig Venter Institute asserts that the minimum number of genes necessary for life is no less than 382.[43] And other estimates were obtained by other scientific studies which stated that the minimal gene set ranges from 244 to about 1600 genes.

Essential Genes
1617
1110
779
653
642
381
271
244

[43]Craig. J. Venter Institute (JCVC) conducted a study to find all the essential genes of the M. Genetalium through global transposon of mutagenesis. As a result they found that 382 out of 482 protein encoding genes were essential.

Interestingly, there is a shifting emphasis in biology from regarding life primarily as a chemical system, to looking at the flow of information.



The common factor present in all living organisms, from bacteria to man, is the information contained in all their cells. It has been discovered that nowhere else can a higher statistical packing density of information be found. In other words, all living organisms possess genetic material that contains information for the development of characteristics. Again, Life is not a self-sustaining chemical system undergoing Darwinian evolution, and there is no such a thing as small or primitive life-forms. Rather, all the information systems in the universe have an extraordinary complexity of structure and multiplicity of function, which will remain a stumbling block in the face of the divine creation deniers.

22. How did life on earth begin?

The frontiers of knowledge have advanced and scientists have resolved one creation question after another. Yet one of the most obvious big questions, the origin of life, remains a great unknown. Stuart Kauffman, one of the prominent biologists specializing in early life research, asserts that: ‘‘whoever claims that science has solved the problem of the origin of the universe is either foolish or deceitful.’’[44]

[44] Kauffman Stuart, *The Search for Laws of Self-Organisation and Complexity*, Oxford University Press, p. 31 as cited in Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), p. 581.

Stuart Alan Kauffman (born September 28, 1939) is an American medical doctor, theoretical biologist, and complex systems researcher who studies the origin of life on Earth. He was a professor at the University of Chicago, University of Pennsylvania, and University of Calgary. He is currently emeritus professor of biochemistry at the University of Pennsylvania and affiliate faculty at the Institute for Systems Biology. He has a number of awards including a MacArthur Fellowship and a Wiener Medal.

Stuart Kauffman

Likewise, *Scientific American* published an article under the title: ‘‘Pssst! Don't tell the creationists but, scientists don’t have a clue how life began.’’ The author of this scientific research article lists all the atheist assumptions about the emergence of life and highlights their absurdities.

We all know that Darwin argued that all of life on earth was the product of undirected natural processes: time, chance, and natural selection. Since Darwin, biologists have relied on such processes to account for the origin of living things. Yet today, this approach is being challenged as never before because contemporary scientists are advancing a powerful idea—the theory of intelligent design. Indisputably, the mystery of the origin of life cannot be explained from a materialistic point of view. Oddly enough, atheists oftentimes accuse us, believers, of relying on gaps in knowledge as evidence for intelligent design. In other words, they claim that whenever there is a gap in scientific knowledge we take it to be evidence of God's existence and we assume that an act of God is the explanation for all phenomena unknown to science. Yet, this is a severe mistake because, in point of truth, the scientific case for intelligent design is based upon recent discoveries in biochemistry, genetics, and molecular biology.

Surely, our intuition prompts us to think about the designer of the inner-workings of the living cell (i.e. the structure and operations of the cell nucleus, the DNA molecule, protein

molecules, and the bacterial flagellar motor…etc) because a design implies a designer, especially intelligent design an intelligent designer, a creator deity. Incontestably, the impression of design is overwhelming in the genetic information encoded in the DNA of all living organisms. In other words, some intelligence beyond humanity must account for the origin and complexity of this encoded information, or else, how does it turn into flesh, blood, organs, hormones, and functions in the utmost accuracy?

A common objection to the belief in God is that God cannot be directly seen or perceived. Atheists ask: why should we believe in what we cannot see? The answer is that God, as the Almighty Supreme Being, unique and otherworldly, exists beyond the cosmic veil in the Unseen. That is, although we cannot see God directly, we can reasonably infer His existence by the signs of His design in the world. Without a doubt, scientific atheism is a fallacy because no one can logically claim that the inability to see something confirms its non-existence. Actually, there are many things in the world we cannot see, but in which we believe, because we deduce their existence from their signs or effects. By definition, science cannot "prove" or "disprove" the existence of God in a direct and conventional way, such as in a laboratory. Simply, science only deals with the physical tangible world of things that can be measured, and God is beyond the physical world and beyond measurement. In short, by making such claims, atheists are not only being intellectually dishonest, but they are also going counter to the guiding principles of the thing that they profess to love so much (i.e. science) because of the difficulty in proving a negative.

Indeed, theism cannot be dismissed as wishful thinking or superstition because the abundant evidence in nature and the plausible rational argument for theism it produces cannot be denied. All the brilliant scisentists have failed to produce even a simplest form of life in spite of all the advanced sciences, universities, sophisticated aboratories…etc. I do not believe that any scientists who examined the evidence would fail to draw the inference that the early conditions of the universe have been deliberately designed with regard to the consequences they produced. In other words, the universe was designed for the very purpose of life and it would be madness to assume that life was a sequence of accidents in the early earth environment when scientists could not create it despite all their scientific capabilities?[45] Perhaps the real superstition, then, is the ungrounded dogma that the universe is a purposeless accident. In fact, even scientists, whose

[45]Https://www.youtube.com/watch?v=zskbSuG4lco (4:13—4:28)
'What we will never observe, ever, is non living chemicals forming a cell'

early writings were not particularly sympathetic to theism, and long-time atheist philosophers, who wrote against theism for many years, upon examining the emerging evidence of fine-tuning, came to conclude that God crafted the abundant complex universe because the fine-tuning is very improbable under the current atheistic hypotheses. God says: And they had already disbelieved in it before and would assault the unseen from a place far away. (The Qur'an 34:53) But even if everything that we just mentioned does not convince the new atheists that there is more to the universe than meets the eye, we have yet to see the compelling scientific evidence that God and the cosmic purpose do not exist.

23. Do atheists have the right to appeal to the future (i.e. claim that the final "theory of everything" is at hand)?

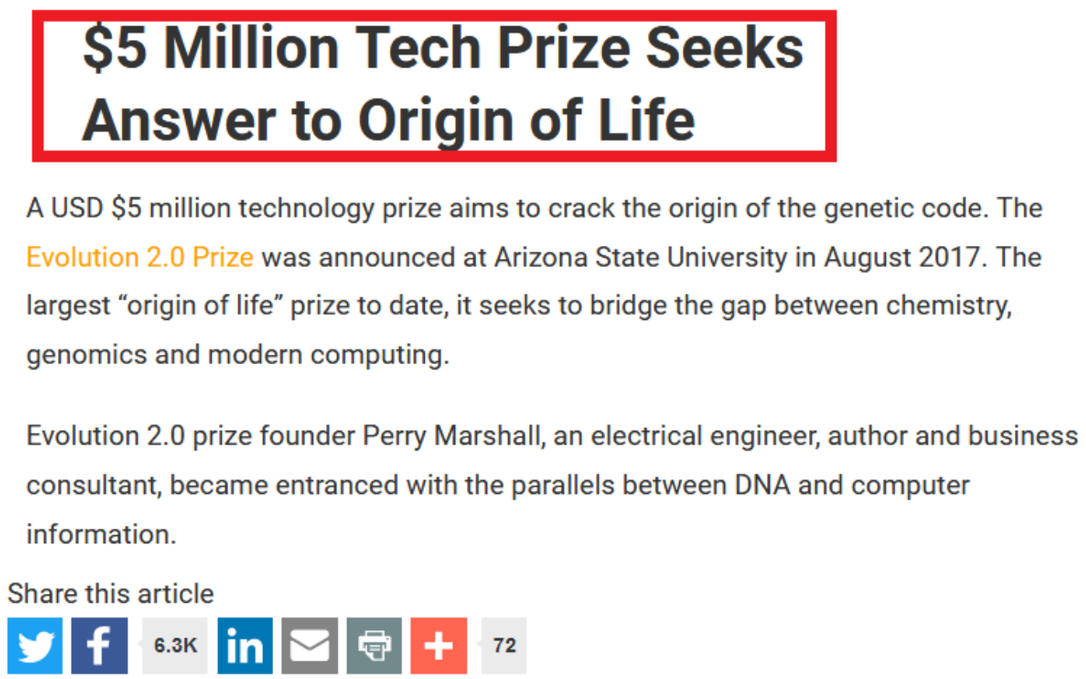
Essentially speaking, conjectures are allowed only within the realm of what is known as contingent existence (i.e. something that is rationally possible). We know for a fact that a self-generated universe (spontaneous creation) is rationally impossible due to the inability of human beings to create even the simplest form of life despite all the advances in science and the concerted efforts of scientists. If it were possible, humans would be able to create life at anytime with the least effort. Verily, those who deny the existence of God and cosmic purpose hoping that science will in the future explain away the life-permitting fine-tuning of the universe are some of the most irrational and misguided people. In fact, what scientists are trying to do is to create a form of life, albeit millions of times simpler than small bacteria?[46] God Almighty says: O people, an example is presented, so listen to it. Indeed, those you invoke besides Allah will never create [as much as] a fly, even if they gathered together for it [i.e. that purpose]. And if the fly should steal from them a [tiny] thing, they could not recover it from him. Weak are the pursuer and pursued. (The Qur'an 22:73) Also, God said in the authentic and agreed upon qudsi ḥadīth: ‘‘who are most unjust than those who try to create something like My creation? I challenge them to create even a smallest ant, a wheat grain or a barley grain.’’[47] Researchers have failed to accomplish this challenge despite all their resources, scientific and technological know-how, and efforts. In short, it is hardly rational or logical to assume that a barren land can

[46] Https://www.youtube.com/watch?v=PmNGZgHH6Jg (7:49—8:02)

[47]Agreed upon ḥadīth, Al-Boukhari, *Sahih Al-Boukhari*, ḥadīth: 7559; Muslim, *Sahih Moslim*, ḥadīth: 2111.

create Man or even bacteria as God says: what is [wrong] with you? How do you make judgement? (The Qur'an 37:154)

In fact, what should call for atheists to really rethink their atheism is that major funding is provided for cracking the code of life: the complete letter-by-letter sequence of genetic information that defines human life—the human genome. Actually, high-stakes science prizes want scientists to look within, all the way down to the A's, T's, C's, and G's of the genetic code. Without a doubt, the origin of life is the hardest question in science and no one currently knows how the first cell came about. The initiated prizes seek an answer to a simpler, more fundamental question: where did the information in DNA come from? Interestingly, scientists are on a fiercely competitive race to capture one of the biggest scientific prizes ever. Perry Marshall and private equity investment group Natural Code LLC have issued a technology prize solve one central question: how do you get from chemicals to code and how do you get a code without designing one? The Evolution 2.0 contest announced at Arizona State University, which will be open until 2026, promises $5000000 to whoever can solve the mystery of how the genetic code came to be.



$5 Million Tech Prize Seeks Answer to Origin of Life

A USD $5 million technology prize aims to crack the origin of the genetic code. The Evolution 2.0 Prize was announced at Arizona State University in August 2017. The largest "origin of life" prize to date, it seeks to bridge the gap between chemistry, genomics and modern computing.

Evolution 2.0 prize founder Perry Marshall, an electrical engineer, author and business consultant, became entranced with the parallels between DNA and computer information.

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As a matter of fact, this prize seeking to unravel the mystery of the origin of the genetic code was doubled to the tune of ten million dollars.[48] Marshall Perry's Evolution 2.0 Challenge,

[48]Https://www.youtube.com/watch?time_continue=49&v=RJSCeLD05M
(12:49—13:05)
''Good morning. I thank you. It is an honour to be here at the royal society. We are going to double the prize value and this is the first most important step for me since I came to Europe.''

announced at the Royal Society in London on 31 May 2019, is the world's largest science research prize.

The Evolution 2.0 Prize offers $10 million to the first person or team to self-organize chemicals into code. The winner or winning team must produce a physical encoder, message, and decoder that self-organize. However, the organizers admit that this contest won't be easy, considering that the goal of the prize is to discover the origin of life. We know for a fact that all known codes are designed, and since no scientist can explain how the DNA code came to be, it must have been designed as well. There is absolutely no chance of this question getting solved and nobody will ever be able to unravel the mystery of the origin of the genetic code.

Indeed, scientists have failed to accomplish the divine challenge (''I challenge them to create even a smallest ant, a wheat grain or a barley grain.''). They could not create the simplest form of life. They know that DNA is the foundation of all life and believe that it is quite an elegant code to boot. Cells have genetic engineering capabilities in that every cell reproduces itself from digital instructions stored in DNA. In other words, DNA has the same features as modern digital devices: layers of digital encoding, decoding, data storage, error detection, error correction and repair in addition to an ability to adapt that beggars the imagination. It is worth asking: how do cells "know" how to repair and heal themselves, adapt to any situation, and make choices? No human software does that and even if you give software millions of chances and billions of years, all it will do is crash.

To conclude, the apparent dichotomy between religion and science is a false one because true faith is not the result of an abandonment of reason as some people imagine. In reality, the

non-theistic explanations face severe difficulties because they are incompatible with the findings of modern science and inconsistent with logic.

24. Did Craig Venter create life?

To begin with, scientists know for a fact that life is impossible without the genetic code because if you take away the DNA, we are dead very quickly. Hence, the principle that they sought to prove over the last years is that genomes can be designed in a computer, chemically made in a laboratory and transplanted into a recipient cell to produce a new self-replicating cell controlled only by the synthetic genome. So Venter's experiment was the proof of this principle.[49] Venter's team assembled a complete DNA of a bacterium using sequences of genetic code created on a computer, then inserted it in another bacterium and initiated synthesis, or in Venter's words ''booted up'' the cell. Hence, they announced the first cell that is totally controlled by a synthetic chromosome that they designed in a computer based on an existing chromosome. According to Venter, they built it from four bottles of chemicals—over a million base pairs of chromosomes. They assembled that and transplanted it into a recipient cell and that new chromosome started being read by the machinery in the cell, producing new proteins, and totally transformed that cell into a new species coded by the synthetic chromosome. In other words, it was the first living self-replicating cell that we have on the planet whose DNA was made chemically and designed in the computer. In a nutshell, yes Venter and his team created a new cell which is alive. But they did not create life from scratch. Venter explains: ''well these are very small cells. They are living. They are self-replicating. But if you're trying to advance life forms like you and me, I think that's still in the realm of science fiction.'' All in all, Venter's team synthesized and modified DNA from one type of bacteria and inserted the artificial genome into another bacterial species whose own DNA had been extracted. Hence, the form of life that was created was not new because what was essentially done was the re-creation of an existing bacterial form of life, except that it was given a prosthetic genome (synthesized in the laboratory), and except that the genome was put into the cytoplasm of a slightly different species. In other words, what Craig Venter did was just a project on a living cell. Paul Nurse, a Nobel

[49]Craig Venter's Scientific Paper 2010:
https://www.ncbi.nlm.nih.gov/pubmed/20488990

Craig Venter's Scientific Paper 2016:
http://science.sciencemag.org/content/sci/351/6280/aad6253.full.pdf

Prize winner in biology, says: ‘‘Venter’s work is a major advance, but it’s not a creation of synthetic life.’’

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NEWS / DID VENTER CREATE LIFE? NOT REALLY, SAY EXPERTS

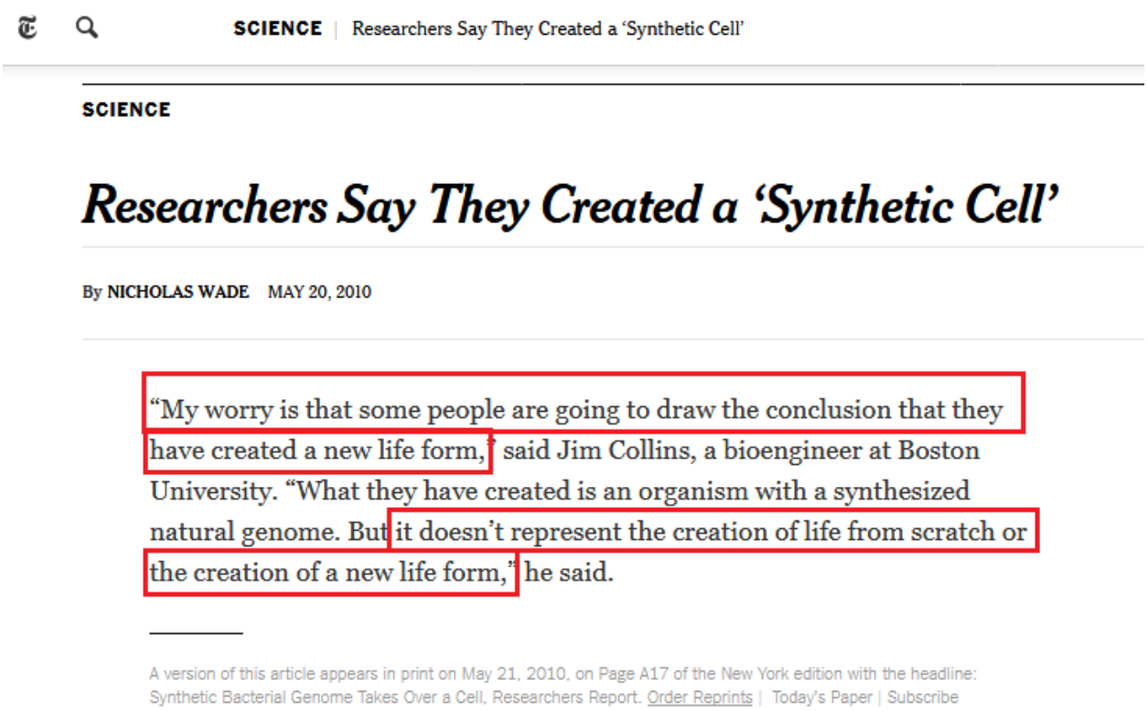
Did Venter create life? Not really, say experts

Amit Bhattacharya | TNN | May 24, 2010, 01:36 IST

A- A+

Nobel-winning British biologist Paul Nurse elaborates the point. In an conversation with BBC, he says, "Venter's work is a major advance. But it's not a creation of synthetic life...Creation of synthetic life would be to make an entire bacterial cell through chemicals."

Jim Collins, a bioengineer at Boston University, says: ‘‘my worry is that some people are going to draw the conclusion that they have creared a new life form. What they have created is an organism with a synthesized natural genome. But it doesn’t represent the creation of life from scratch or the creation of a new life form.’’


SCIENCE | Researchers Say They Created a ‘Synthetic Cell’

SCIENCE

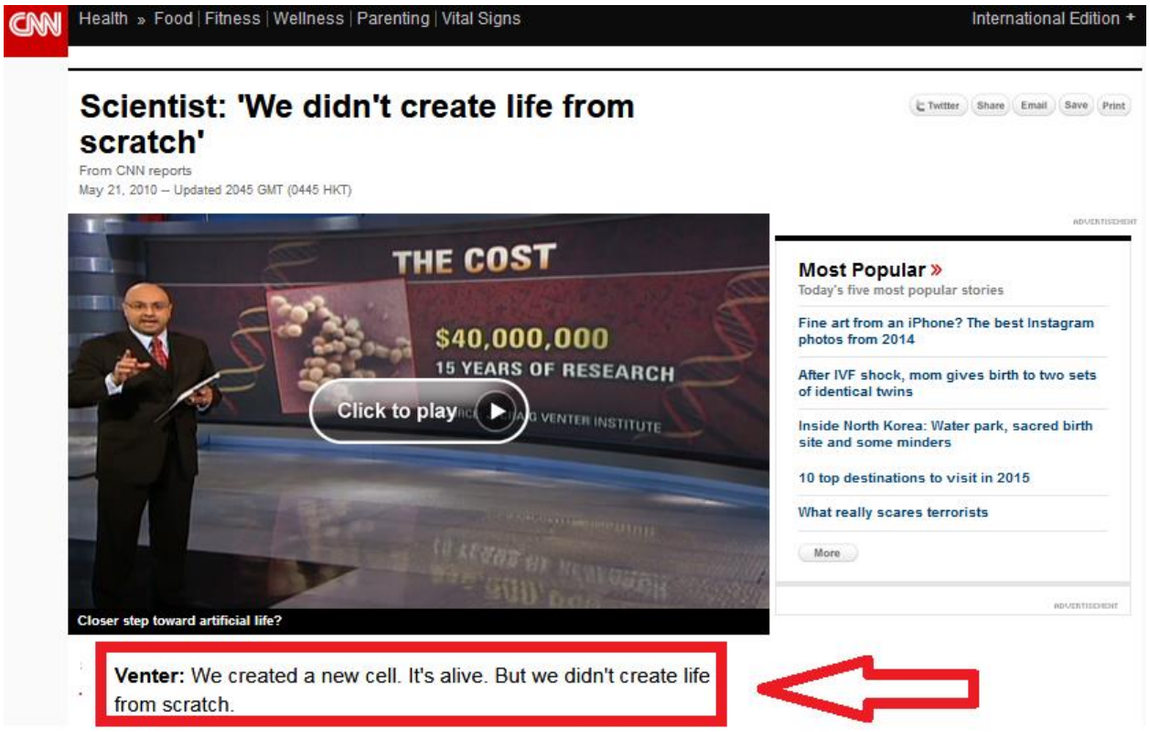
Researchers Say They Created a ‘Synthetic Cell’

By NICHOLAS WADE MAY 20, 2010

“My worry is that some people are going to draw the conclusion that they have created a new life form,” said Jim Collins, a bioengineer at Boston University. “What they have created is an organism with a synthesized natural genome. But it doesn’t represent the creation of life from scratch or the creation of a new life form,” he said.

A version of this article appears in print on May 21, 2010, on Page A17 of the New York edition with the headline: Synthetic Bacterial Genome Takes Over a Cell, Researchers Report. Order Reprints | Today's Paper | Subscribe

Similarly, Craig Venter himself said: ‘‘we created a new cell. It’s alive. But we didn’t create life from scratch.’’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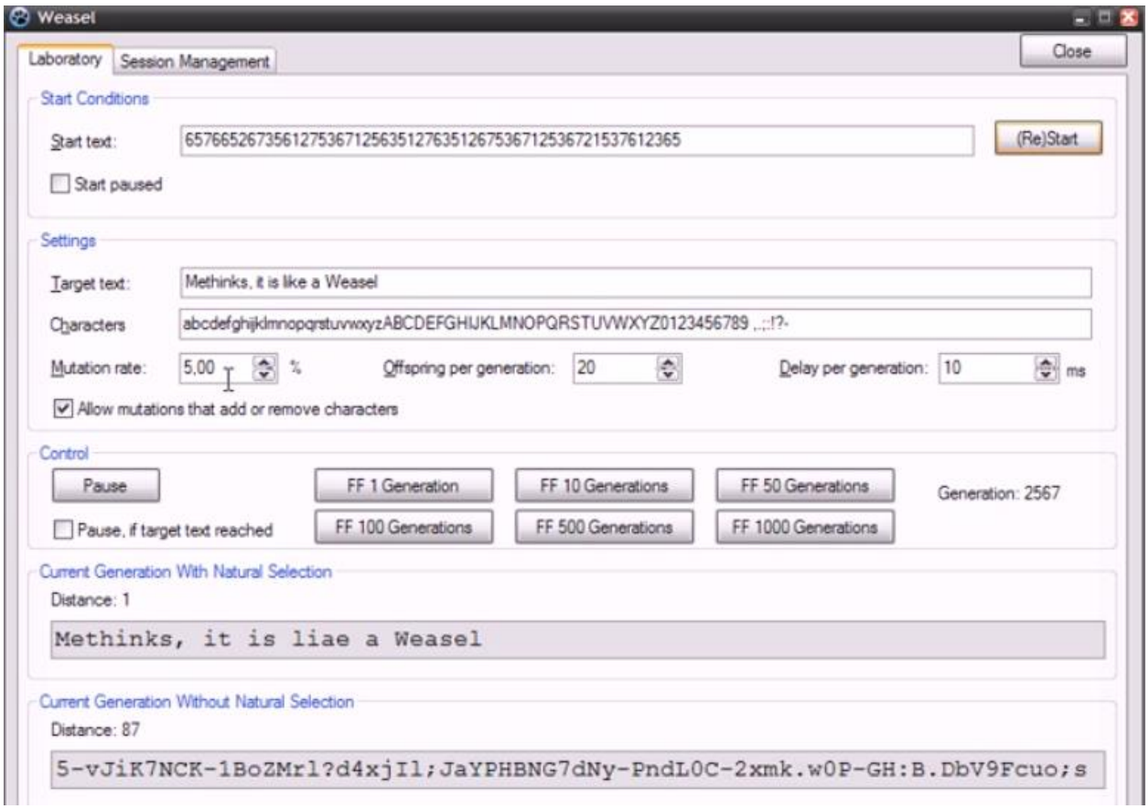
Venter: We created a new cell. It's alive. But we didn't create life from scratch.

In sum, some atheists are hyping Venter's recent achievement claiming that what seemed to be an intractable puzzle, with significant religious overtones, has been solved. However, Venter has neither created nor demystified life. Funnily enough, he re-created life out of life. As many point out, scientists still have not come close to creating a living organism from non-biological materials, that is to say, they have not shown how life began (i.e. how inanimate materials become animate). Indeed, many scientists admit that the problem of life's origin had turned out to be much harder than they had imagined. Without a doubt, life is sacred, special, ineffable and beyond human understanding. One of the great ironies of modern science is that as scientists gain more power over life, it remains as fundamentally mysterious as ever. Surely, if atheists thought honestly about all this, they would not get a wink of sleep.

25. What about Richard Dawkins' project to explain the accidental appearance of the genetic code?

The awesome engineering design seen throughout the living world is represented by an unimaginably vast amount of information which is stored and transmitted in a coded form. Dawkins, one of the most influential neo-Darwinists in the world who promotes atheism as a logical consequence of evolution, realises that the basic challenge is to explain how all this information arose by natural processes, that is, without a guiding intelligence. However, experts in information science make it perfectly clear that it is impossible for random processes to generate true information. Dawkins tried to overcome the dilemma of the emergence of the genetic information by using a funny game. Actually, he used Richard Hardison's program to

show that evolution can accomplish amazing things. His computer program starts with a random sequence of 28 letters or spaces. It is then copied repeatedly, representing reproduction. Random copying errors are allowed, representing mutations. The computer program checks all the 'daughter' sentences, and selects that one which most resembles the target sequence, 'Methinks it is like a weasel'. This is said to represent natural selection. Not surprisingly, within a few generations the target sentence is reached. This is purported to show that real information can arise by the natural processes of mutation and selection, unaided by intelligence.[50]



Obviously, Dawkins's evolution simulation has some major limitations to it. Scientists say this sort of computer game can be played by anyone, and will always reach its goal because the whole design involves selecting a target in advance. In other words, the program is fixed, the target is specified and even the number of letters is given in advance. It is therefore obvious that no information is generated in Dawkins' example. On the contrary, the information (the sentence 'Methinks it is like a weasel') has been predetermined. Dawkins is supposed to be showing how mutations and natural selection generate new information. If he gives the information to start with, then the simulation is not creating the information. Consequently, Dawkins has not demonstrated what he claimed. Moreover, on its evolutionary journey from gibberish to the line predetermined by Dawkins, the program passes through and builds from utterly dysfunctional intermediates which is a problem because the Darwinian process of natural selection tends to

[50]Https://www.youtube.com/watch?v=AXxCsHGIxww

eliminate dysfunctional offspring. Furthermore, the computer simulation has been programmed to aim for a particular distant goal which is another problem because evolution does not work towards particular distant goals, that is, as Darwinians put it, it is not mindful but mindless, not seeing but blind.

It is worth asking, if the computer program implies capacity, knowledge, design, will, know-how, fine tuning, why did Dawkins stipulate that in his experiment whilst he objects to ascribe such attributes to the creator who designed the fine tuned early conditions of the universe? Without a doubt, it is madness to deny the existence of physical laws specifically designed for the purpose of life. Ironically, though everything in the early universe was part of a deep-laid scheme, Dawkins insists that it emerged as a result of mere random quirks. In short, Dawkins, in his experiment, aims for a pre-determined specific target which the computer seeks to achieve in that it compares and checks so as to preserve the letters programmed and exclude the rest. All this implies features of a deliberate, intentional and purposeful intelligent design, which are the core of what the believers talk about in the cause of creation.[51]

26. Pro-Darwin scientists hold that the complex eye had evolved from simple precursors because complex structures evolve from simpler ones, step-by-step, through a gradual evolutionary process. Is this true?

Essentially speaking, evolutionary scientists try to get around the irreducible complexity of the genetic code by coming up with simpler more achievable alternatives to explain molecules-to-man evolution. This stance reveals the core of the evolutionary problem which illustrates that we are dealing with a theory that depends entirely on metaphysical propositions rather than scientifically proven facts. By and large, Darwinists argue that evolution can be used as an explanation for complex structures if we can imagine a series of small, intermediate steps leading from the simple to the complex. So from the perspective of evolutionary theory, the human eye is evidence for unguided evolution and against intelligent design. They argue that it is flawed, proving that it was not intelligently designed but evolved by unguided processes in that little by little, one improvement at a time, the system became more and more complex, eventually resulting in the fully functioning, well-adapted organ that we call the eye.

[51]Farhat Karim, *I Am not Atheist...Why?*, (Cairo: Nahdet Misr Publishing Group, 2014).

To borrow their words, the eye—the supposed paragon of intelligent design—is badly and stupidly designed because there would be no blind spot if the vertebrate eye were really intelligently designed. They even say that that it is certainly not the sort of eye an engineer would create from scratch and no intelligent engineer would be expected to design the functionally nonsensical arrangement of cells in the human retina. Therefore, they attributed this ‘‘poor design’’ to unguided evolution which yields fitter types that often have flaws which violate reasonable principles of intelligent design. They explain that an excellent example of imperfect design is the eye of vertebrate animals in which the photoreceptors face backward toward the wall of the eye. According to them, this is not an optimal design because there are no working hypotheses about why the vertebrate retina is wired in backwards. They assume that it has been a random development that then ‘‘stuck’’ because a correction of that magnitude would be very difficult to pull off with random mutations. They argue that while vertebrates were not so lucky, the eyes of cephalopods are more optimally designed because during the evolution of the cephalopod eye the retina took shape in a more logical way with the photoreceptors facing outward toward the light.

But is the human eye really evidence against design? In fact, so much research about the choriocapillaris and retinal pigment epithelium (RPE) and the superiority of vertebrate eyes to cephalopod eyes is published, but the critics of intelligent design do not bother to check the scientific literature. They simply assume that evolution is true and that they know how an eye should be designed. Then they conclude that the human eye is badly designed, claim it as evidence for evolution, and ignore the contrary evidence. Basically, the combination of nerves, sensory cells, muscles, and lens tissue in the eye could only have been designed from scratch. After all, how could evolution, acting on one gene at a time, start with a sightless organism and produce an eye with so many independent parts, such as a retina, which would itself be useless without a lens, or a lens, which would be useless without a retina?

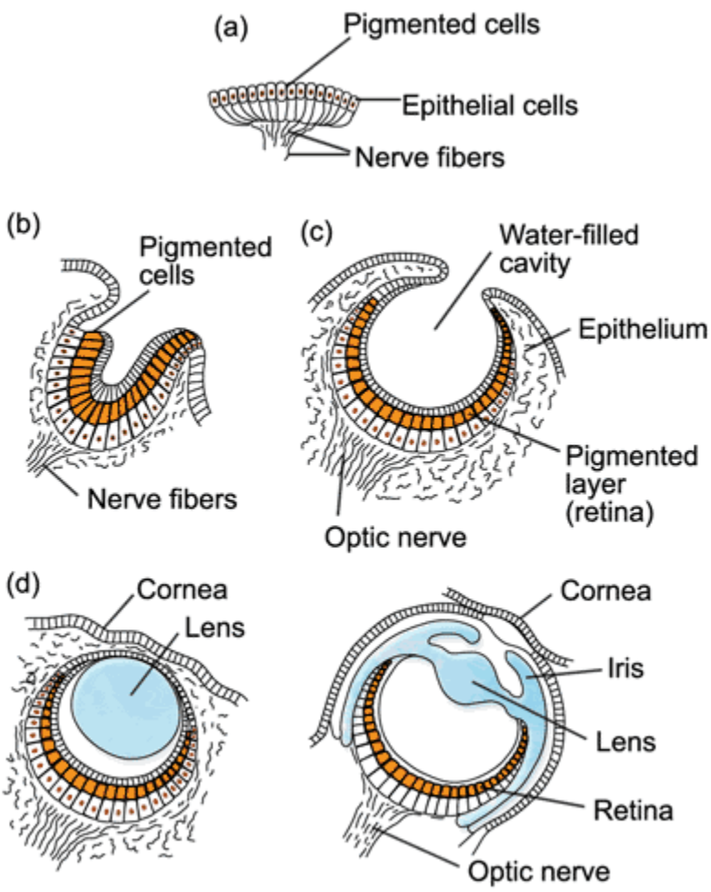
To begin with, the light-sensing cells in a vertebrate retina require lots of nutrients and vast amounts of energy. Actually, about three-quarters of the blood supply to the eye flows through a dense network of capillaries called the choriocapillaris which is situated behind the retina. Oxygen and nutrients are transported from the choriocapillaris to the light-sensing cells by an intermediate layer of cells called the retinal pigment epithelium. In addition to transporting oxygen and nutrients to the light-sensing cells, the RPE performs two other essential functions. First, the dark pigment in it absorbs scattered light, improving the optical quality of the eye.

Second, it removes toxic chemicals that are generated in the process of detecting light. The light-sensing cells contain stacks of discs, and it has been shown experimentally that a photoreceptor cell continually renews itself by shedding discs at the end closest to the RPE and replacing them with newly synthesized discs at the other end. The RPE then engulfs the shed discs and neutralizes the toxins. Blood is almost opaque, and the RPE absorbs light. If the light-sensing cells were to face the incoming light, the blood-filled choriocapillaris and the RPE would have to be in front of the retina, where they would block most or all of the light. By contrast, nerve cells are comparatively transparent, and they block very little of the incoming light. Hence, because of the high metabolic requirements of the light-sensing cells and their need to regenerate themselves, the inverted retina is actually much better than the "tidy-minded" design imagined by evolutionary biologists.

Moreover, intelligent design advocates explain that the blind spot is not a serious problem because the blind spot produced by the left eye is not in the same place as the blind spot produced by the right eye. In other words, in humans with two good eyes, the field of vision of one eye covers for the blind spot of the other eye and vice versa. Furthermore, the claim that cephalopod eyes are better than vertebrate eyes is ill-founded. In 1984, a team of Italian biologists pointed out that cephalopod eyes are physiologically inferior to vertebrate eyes. Simply put, in vertebrate eyes, the initial processing of visual images occurs in the retina by nerve cells right next to the photoreceptor cells, whereas in cephalopod eyes, nerve impulses from the photoreceptor cells must travel all the way to the brain to be processed. They therefore concluded that a cephalopod eye is just a passive retina which is able to transmit only information, dot by dot, coded in a far less sophisticated fashion than in vertebrates, resulting in slower processing and fuzzier signals.

To conclude, good empirical science searches for explanations that fit the evidence. But evolutionists are committed to telling materialistic stories about unguided evolution, even when those stories do not fit the evidence. In short, as intelligent design scientists put it, atheists'evolution stories are empirically dead, but they keep coming anyway, like zombies. We know for a fact that the miraculoussness of the human eye goes down to the light-sensitive cells. Why are the photoreceptor cells sensitive to light? How does photosensitivity convert to electrical signals? And how do electrical signals transform into awareness and sight of what is in front of us? It is sheer nonsense to attempt to explain away the miracles of the human eye by assuming the existence of other less developed eyes. Yet, such a proposition is nothing new

because atheists time and again put forth irrational assumptions to escape the intelligent design truth.

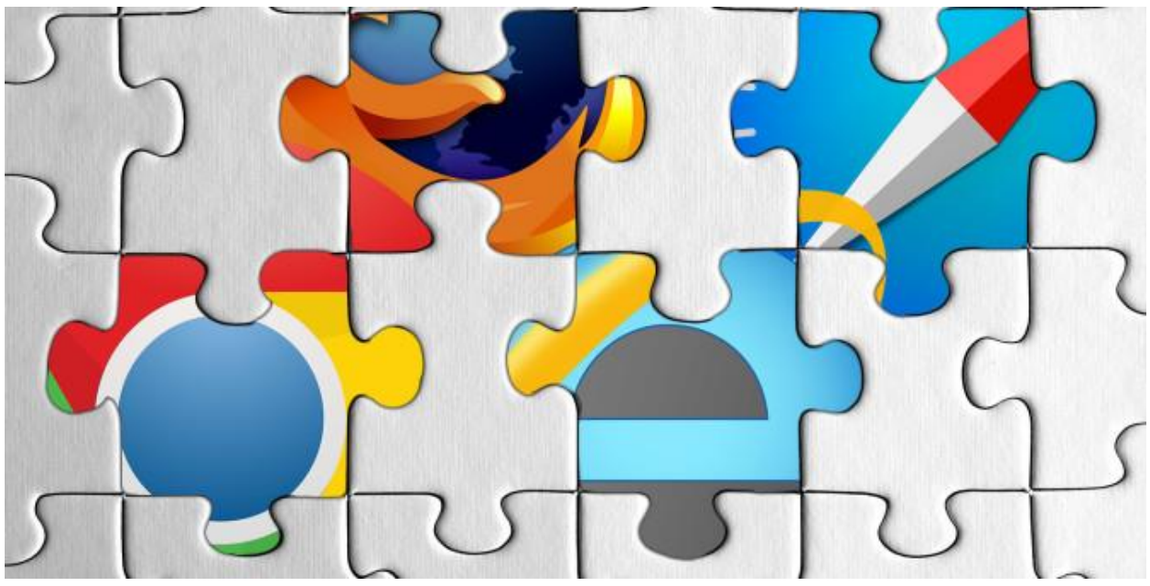


Let me ask a funny question and try to imagine the typical evolutionary answer. Did nature create a tray of fresh kunafa with cheese?

Evolutionists would probably say ‘yes’ and that it is a very simple matter. I can imagine their narrative: ‘‘at some time immemorial, the meteorite falls caused the wheat in nature to be milled into flour, which with a little rain turned into dough. The rocks surfaces in the volcanic kilns were ideal for quick cooking. As for the delicious taste of the kunafa, it came from the abundant sugar cane which was melt with hot springs. Cheese appeared because there was an abundance of

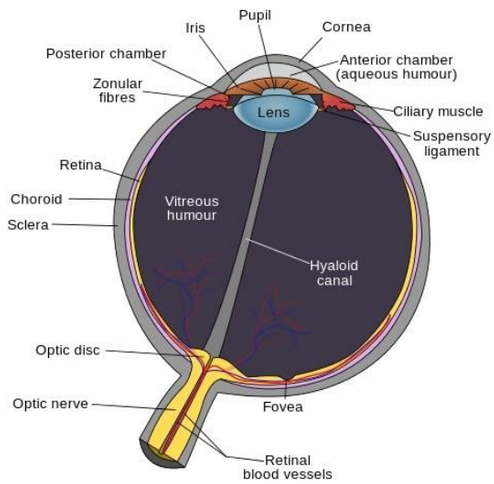
milk coming from cows' udders after feeding their young ones.'' This sounds insane, isn't it? I bet you feel bored just reading this and indeed only gullible people will believe such nonsense. It may sound like an exaggeration, but not by much, because atheists' statements are pretty absurd.

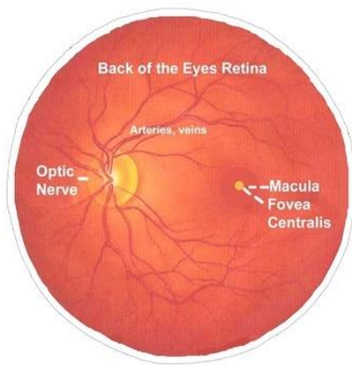
Quite simply, the availability of raw materials (i.e. wheat, sugar cane, milk, cheese) would never allow spontaneous creation. Surely, if we were to wait for millions of years, not a single kunafa tray would ever be prepaped by chance. It is necessary to have the knowledge and skill to prepare a tray of kunafa (i.e. the know-how). This example explains why reflecting on all the creation should create an immense sense of awe and gratitude to God. Hence, the claim that the human eye is a product of a brilliant evolution rather than intelligent design is ill-founded. All that an evolutionist does is that he, in his mind, dismantles the parts of the complex biological systems, such as the eye, and then tries to reassemble these parts from different places of nature as if he were playing a puzzle game. We are willing to grant that the human imagination is fertile and some may have the gift of generating stories, but at the molecular level inside the cell all the details are important since a defect in one letter inside the genetic code may corrupt the entire system.

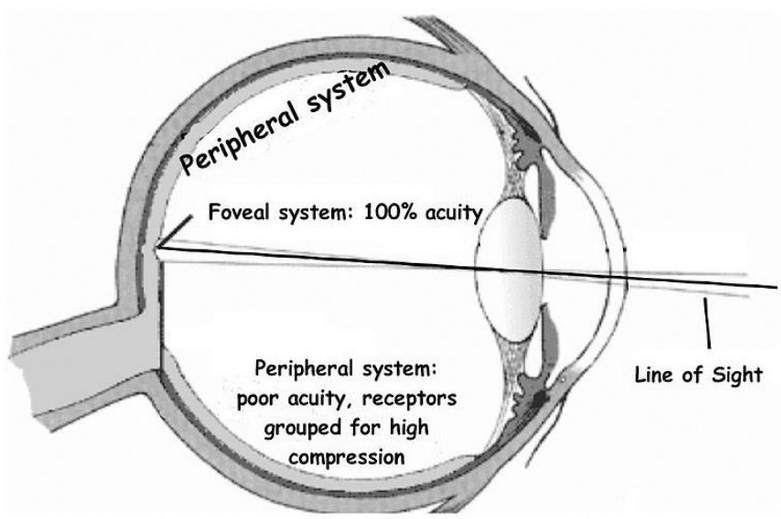


As a matter of fact, the human eye is an organ of great complexity, both in structure and function. It contains, like a top-of-the-line modern camera, a self-adjusting aperture, an automatic focus system, and an inner surface that minimizes the scattering of stray light. Moreover, its sensitivity range gives us excellent vision in both sunlight and moonlight, which far surpasses that of any film. Furthermore, its neural circuitry enables the eye to automatically enhance contrast, and its color-analysis system enables it to quickly adjust to lighting conditions (incandescent, fluorescent, or sunlight) that would require a photographer to change filters and films. It has a resolution of 576 megapixels and contains the purest lens in the world. A typical

photoreceptor cell such as a rod is roughly 100 µm (does not exceed an area of half a square millimeter). In short, the human eye must be the product of careful and conscious divine design because it is so perfectly formed that it cannot be explained by the random workings of evolution alone.[52]







Peripheral system for general holistic impression of the situation.
Foveal system for high quality details.

Let me briefly explain how the impressive vision process works to show that the remarkable complexity of this system cannot be explained by Darwinian mythical deconstruction. The classic visual cycle is initiated by the conversion of a single photon of light energy into an electrical signal in the retina. Rhodopsin is the primary photoreceptor molecule of vision. It is a member of the G-protein coupled receptor (GPCR) family and is commonly found in the photoreceptors in the retina and becomes activated by photons of light. The photoreceptors in the retina that contain rhodopsin are rods. Rhodopsin is attached to 11-cis retinal which becomes excited by a photon of light and isomerizes to become all-trans conformation. This

[52]As-Sa'id Muhab, *Ask and don't be afraid*, episode 18/ Part 2: ‘Can the Eye Appear by Chance?’ Https://www.youtube.com/watch?v=a9GElAQYVDs

excitation activates rhodopsin and leads to depolarizing of neurons which is how the image is transmitted to the brain. When rhodopsin is activated by light the protein couples with the G protein transducin which is the first step in the signal cascade. Rhodopsin must undergo several conformational changes before being able to bind transducin. Rhodopsin is initially converted to metarhodopsin II which is the active form of rhodopsin. Once the protein is active then metarhodopsin binds the G-protein tranducin and the GDP is exchanged for GTP. The G protein subunits dissociate and cause a decrease in cytosolic cGMP. The decrease in cGMP also causes the closing of calcium channels. When calcium concentrations drop the photoreceptors become hyperpolarized and this ensures the action potential is sent onward toward the brain. The collective change in the receptor potentials of rods and cones triggers nerve impulses that our brain interprets as vision.

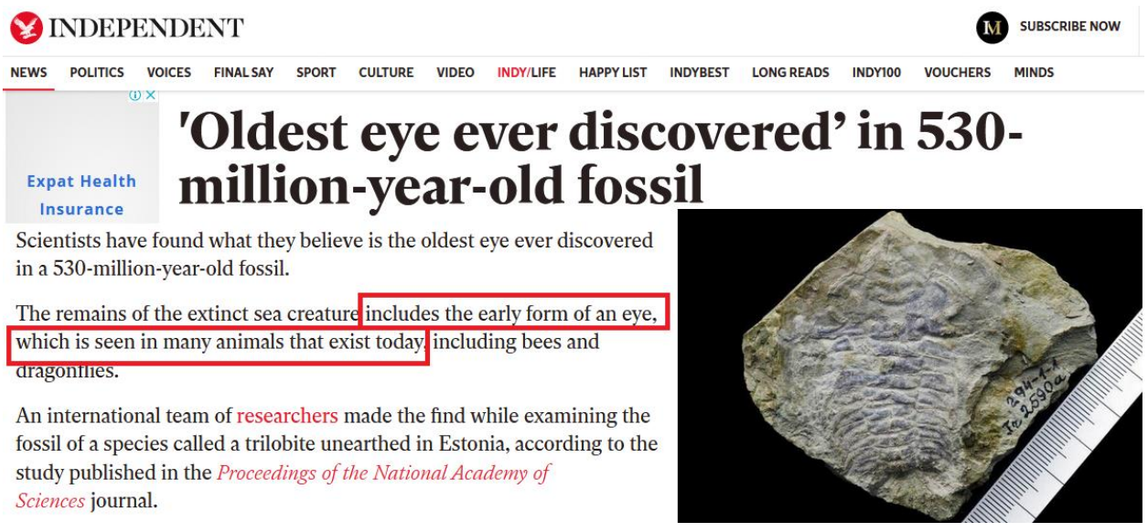
It is amazing how photoreceptors turn the light into electrical signals which travel from the retina through the optic nerve to the brain. Then the brain, as if it had a pre-integrated dictionary, turns the signals into the images you see. Indeed, this is a miracle which dazzles me everytime I think about it. The brain lies in a dark box (the skull), and only electrical signals reach it. So how does it interpret nerve impulses as vision? How does it distinguish between ten million different colour shades? How does it adjust to all distances and change focus automatically? Most importantly, this whole miraculous process takes place instantly the moment we open our eyes. Most strikingly, as we have explained, the breakdown of rhodopsin triggers a transduction process involving a rapid cascade of intermediates. Once the all trans-retinal detaches from the opsin it is transported to the epithelium by a protein carrier. Within the epithelial cells, retinal is converted to its 11-cis isomer in an ATP requiring process. Retinal then heads back to the photoreceptor cells outer segments to begin the process again.

The gene code for rhodopsin and the enzymes that allow it to break down after the completion of a vision cycle are encoded in our DNA cells, and so are the gene codes of retina, lenses, eyelashes, eyebrows, skull bones, brain, and all the human organs. Ironically, all of the atoms in the universe are not enough to code for a single rhodopsin protein by chance, let alone to create the retina or the brain, or the amazing process through which the brain interprets nerve impulses as vision, or to create the human being himself. The probability of the emergence of a simple anzyme is 20 to the power of 100; while the total number of atoms in the universe is 10 to

the power of 80.[53] God says: This is the creation of Allah. So show Me what those other than Him have created. Rather, the wrongdoers are in clear error. (The Qur'an 31:11)

27. Does fossil research suggest an evolution of the eye?

Funnily enough, the findings of paleontologists are never what evolutionists assume and hope for. Contrary to their claims, the appearance of the eye in the fossil record is strikingly sudden. Scientists have found what they believe is the oldest eye ever discovered in a 530-million-year-old fossil of a species called a trilobite (i.e. the Cambrian Period). In fact, the earliest form of an eye seen in many animals that exist today was found in the remains of this extinct sea creature.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'Oldest eye ever discovered' in 530-million-year-old fossil

Scientists have found what they believe is the oldest eye ever discovered in a 530-million-year-old fossil.

The remains of the extinct sea creature includes the early form of an eye, which is seen in many animals that exist today, including bees and dragonflies.

An international team of researchers made the find while examining the fossil of a species called a trilobite unearthed in Estonia, according to the study published in the *Proceedings of the National Academy of Sciences* journal.

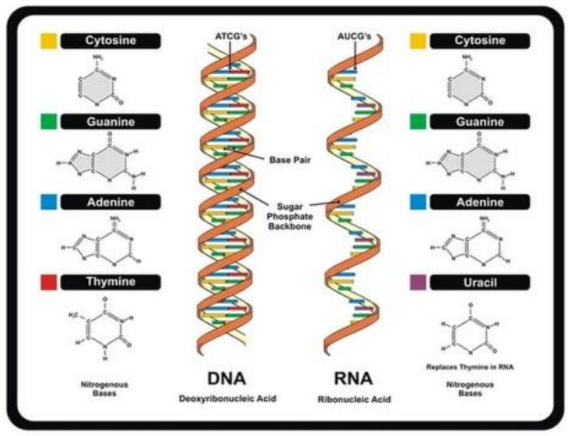
It is noteworthy that evolutionists do not have a single detailed model for the emergence of a single functional molecule within a cell in their theory, let alone a detailed model for the appearance of an organ such as the eye. In a word, they only have assumptions and are constantly disappoined with the findings of fossil research.

28. Is the ‘‘RNA world’’ theory, which posits ribonucleic acid as the first biomolecule, correct?

DNA and RNA are both types of nucleic acids, which are large molecules found in all living cells. Nucleic acids are the information-carrying molecules of the cell. They store all the genetic material of an organism, which is passed on to offspring (inherited) when the organism reproduces. DNA stands for deoxyribonucleic acid. It is the information molecule and stores all

[53]Dawkins Ritchard, *Climbing Mount Improbable*, p. 75 as cited in Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), p. 652.

the genetic material of a cell. It also contains instructions for the synthesis of other molecules, like proteins. RNA stands for ribonucleic acid. Its function is to carry out the instructions encoded in DNA.



There are now almost as many theories of life's origin as there are theorists. Perhaps the most popular is the ''RNA world'' theory, which posits ribonucleic acid as the first biomolecule, because whereas DNA cannot replicate without the help of enzymes, RNA can act as its own enzyme, snipping itself in two and splicing itself back together again. However, RNA and its components are difficult to synthesize in a laboratory, let alone under plausible prebiotic conditions. Moreover, once RNA is synthesized it can make new copies of itself only with a great deal of coaxing by a chemist. Some scientists believed that some simpler—and possibly quite dissimilar—molecule must have paved the way for RNA, but no strong candidate has emerged. Hence, scientists consider the hypothesis of the existence of the RNA world before the DNA world as the worst theory of early evolution because RNA is so delicate and it is only meant to be a temporary store of information. As a consequence of its delicacy it is unlikely, scientists say, to be useful as a starting point for life.[54] In other words, it can not precede the first cell because it has to be enclosed in a cellular environment to be stable, to be copied and to be useful.

29. Is natural selection a scientific theory or a metaphysical proposition?

Karl Popper, a famous agnostic and one of the most influential science philosophers of the twentieth century, declared early in his career in 1974: ''evolution by natural selection is

[54]Https://www.youtube.com/watch?v=zskbSuG4lco (32:47—33:20).

almost a tautology and not a testable scientific theory, but a metaphysical research programme.''[55]

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Karl Popper: Philosophy of Science

Karl Popper (1902-1994) was one of the most influential philosophers of science of the 20th century. He made significant contributions to debates concerning general scientific methodology and theory choice, the demarcation of science from non-science, the nature of probability and quantum mechanics, and the methodology of the social sciences. His work is notable for its wide influence both within the philosophy of science, within science itself, and within a broader social context.

However, Popper took his criticisms back because he was attacked by evolutionists. But, in 1992, two years before his death, Popper confessed to *Scientific American* that he still found Darwin's theory dissatisfying and that the scientitifc community ought to look for alternatives.

SCIENTIFIC AMERICAN.

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> Early in his career, the philosopher Karl Popper (yes, cited by F and P-P) called evolution via natural selection "almost a tautology" and "not a testable scientific theory but a metaphysical research program." Attacked for these criticisms, Popper took them back. But when I interviewed him in 1992, he blurted out that he still found Darwin's theory dissatisfying. "One ought to look for alternatives!" Popper exclaimed, banging his kitchen table.

Karl Popper argued that evolutionary theory contains no testable laws and is therefore a metaphysical research program (i.e. 'metaphysical' because non-falsifiable). Popper defended the thesis that there are no empirical laws of evolution because he believed that there are no general laws governing the evolution of societies, the evolution of organisms, or the evolution of the whole universe. His crucial point is that although scientists may assume that any actual succession of phenomena proceeds according to the laws of nature, it is important to realize that practically no sequence of, say, three or more causally connected concrete events proceeds according to any single law of nature.

Moreover, he pointed out that the principle of natural selection is a tautology and that the explanatory power of a tautology is zero. In other words, according to Popper, evolutionary

[55] Karl Popper, ''Darwinism as a Metaphysical Research Programme'', Methodology and Science, p. 103-119.

biology lapsed into tautology (i.e. the theory of the survival of the fittest became tautological and irrefutable). As he put it, the trouble about evolutionary theory is its tautological character in that Darwinism explains evolution by 'the survival of the fittest', yet there does not seem to be much difference between the assertion 'those that survive are the fittest' and the tautology 'those that survive are those that survive.'' He explained that the statement "evolution tends to produce higher forms because only the fittest survive" may sound like an explanation, but if we substitute here for "the fittest" its defining phrase, we get: "evolution tends to produce higher forms because those forms which more often survive more often survive" i.e. the "because" phrase has degenerated into a tautology, and tautology cannot explain anything.

Popper held that all tautologies are equivalent to "all tables are tables" or "those who live long are those who live long." Again, he argued that the central problem of evolution is that, according to this theory, animals which are not well adapted to their changing environment perish; consequently those which survive (up to a certain moment) must be well adapted. Popper explained that this formula is little short of tautological, because 'for the moment well adapted' means much the same as 'has those qualities which made it survive so far.' Hence, a considerable part of Darwinism is not of the nature of an empirical theory, but it is a logical truism. In short, postulating testable empirical laws is, for Popper, a necessary condition for a theory to be scientifically testable, which is why he concluded that evolution theory is a metaphysical research program. Interestingly, even what seemed as a change of heart (his subsequent retraction) was nothing more than Popper's old view (initial position) in disguise because Popper did not change his mind at all about the substance of his original claim.

Scientific American featured the confessions of Popper and other researchers in an article entitled: ''Dubitable Darwin? Why some Smart, Nonreligious People Doubt the Theory of Evolution.''

Dubitable Darwin? Why Some Smart, Nonreligious People Doubt the Theory of Evolution

Popper highlighted his position on the evolutionary theory in detail in his last book published a year before his death *Evolutionary Epistemology* in which he cited the confessions of the most prominent scientists of the theory of evolution throughout its history.[56] Popper quoted C. H. Waddington, one of the greatest scholars of Darwinism in Popper's opinion, as saying: ''evolution via natural selection is almost a tautology.'' A tautology is an expression or phrase that says the same thing twice, just in a different way without imparting additional force or clearness, reminding us of the old proverb ''after great effort, he explained that water is water.'' Indeed, the analysis of the tenets of evolution, namely natural selection, reveals that it lacks the predictive and operational qualities which define scientific theories, which is why some scientists argue that it is a tautology. Having said that, tautologies may be useful logical aids, but they cannot replace true theories. In other words, what evolutionists present is a body of thought resting on metaphysical rationale rather than empirical science. Quite simply, just because a living organism is alive, Darwinists assume that it has been naturally selected without any scientific evidence. In other words, evolutionists' claims are not founded upon scientific observation and experiment but are merely metaphysical hypotheses. We may ask: perhaps, something else could be responsible for keeping this organism alive?

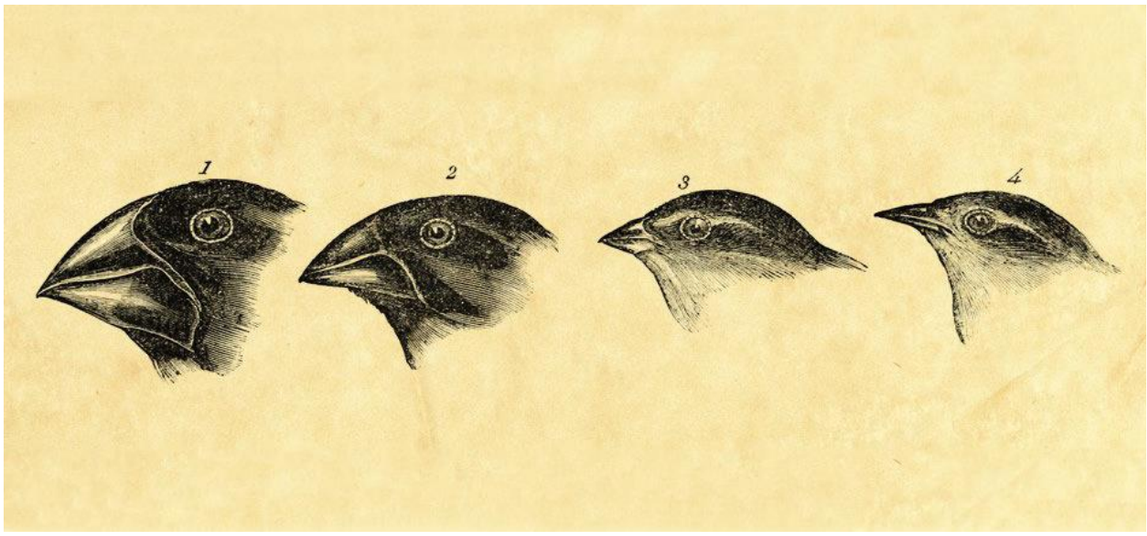
Additionally, Popper relates that other influential scientists of Darwinism share Waddington's position such as Ronald Fisher and G. B. S. Haldane, the founders of Neo-Darwinism, as well as George Gaylord Simpson an American paleontologist who worked for more than thirty years in the administration of the National Museum of Natural History in America. Interestingly, years after Popper'confessions, his statement became a scientifically established reality in the laboratories of the University of Michigan, where an attempt was made to apply the theory of evolution. Scientists created a simulation in which bacteria go through a sequential stimulation that takes a million years in nature. The result was the emergence of trillions of bacteria, but not a single protein appeared, and no species evolved into another. The experiments demonstrated that natural selection and evolution do not work.[57]

Joseph Hooker, a British botanist and explorer, sent a letter to Darwin in 1862 in which he wrote: ''do you think that the variation in the shape of birds' beaks or the difference in the shape of organisms within the same species occurred with natural selection? Not at all! The fact

[56]Karl Popper, *Evolutionary Epistemology, Rationality, and the Sociology of Knowledge*, third edition, (Chicago: Open Court Publishing Company, 1993)

[57]Https://www.youtube.com/watch?v=_rebW1J-Ozk (6: 20—7:35)

of the matter is that such variations are the result of ancestors'genetic diversity. There are differences within a species which allow the multiple shapes.''



Interestingly, Hooker described in his letter what, after about 100 years, came to be known as the genetic pool. A gene pool is the total genetic diversity found within a population or a species in that the larger the genetic pool, the more the diversity and the more opportunity this population will have to survive environmental stress that may impact on them. In other words, the gene pool is really good in the sense that the larger the gene pool, the more the survival of that particular population in terms of withstanding different things that may come in terms of environment. Darwin responded to Hooker's letter saying: ''but the part of your letter which pitched me head over heels with astonishment is that where you state that every single difference which we see might have occurred without any selection. I do and have always fully agreed; but you have right got round the subject and viewed it from an entirely opposite and new side.''

/ Letter / DCP LETT 3834.xml

Darwin Correspondence Project

Transcript | Original | Around this date | With this correspondent

To J. D. Hooker [after 26] November [1862]

But the part of your letter which fairly pitched me head over heels with astonishment is that where you state that every single difference which we see might have occurred without any selection. I do & have always fully agreed; but you have got right round the subject & viewed it from an entirely opposite & new side you took me there, I was astounded. When I say I agree, I must make proviso, that under your view, as now, each form long remains adapted to certain fixed conditions & that the conditions of life are in long run changeable; & 2d, which is more important that each individual form is a self-fertilising hermaphrodite, so that each hair-breadth variation is not lost by intercrossing. Your manner of putting case would be even more striking than it is, if the mind could grapple with such numbers— it is grappling with eternity— think of each of a thousand seeds bringing forth its plant, & then each a thousand. A globe stretching to furthest fixed star would very soon be covered. I cannot even grapple with idea even with races of dogs, cattle, pigeons or fowls; & here all must admit & see the accurate strictness of your illustration.—

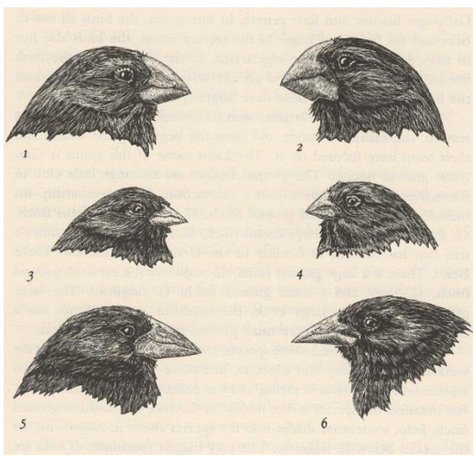
Indeed, the advocates of the theory of evolution who are still arguing that their theory is correct are like a group of prospectors searching day and night for a treasure of gold, digging and breaking tons of mudrocks, sand rocks and sedimentary rocks, even though the phrase ‘‘The treasure is here’’ is inscribed on a cellar close to them. These prospectors ignore this phrase because they started from the premise that the treasure of gold must be underground. Similarly, perfected divine craftsmanship is before evolutionists’ eyes, but they turn a blind eye to it because they start from the premise that there must be a scientific explanation for the origin of life and genetic diversity. So they are still objecting even though the signs of the elaborate divine creation are in front of their eyes at every moment and despite the fact that it has been proven that the theory of evolution and natural selection do not work. Unfortunately, this will result in severe harm to science and a waste of academic research funds which could have been more effectively invested in other areas.

30. Can microevolution lead to macroevolution?

Evolutionists have a tendency to use linguistic tricks, that is to say they use terms inaccurately to mislead people into believing their false claims. One such term is ‘microevolution’ which they use to refer to ‘‘adaptations within a species.’’ We are willing to grant that DNA changes and in turn can cause small changes in the species and we know for a fact that an adaptation is a way an organism changes as it responds to changes in its environment. However, the opposition comes when evolutionists propose that microevolution over very long periods of time can lead to macroevolution i.e. these small changes in DNA add up and, eventually, new species come into being that can no longer breed with the original population. As we have explained earlier, a gene pool refers to thorough genetic diversity that exists within a population. For example, members of the human species are different in terms of color (black, white) and height (tall and short)…etc. This genetic diversity allows differences between members of the same species.

Let us use a very simple analogy to illustrate the concept of the genetic pool. Imagine that we have the following ingredients in a kitchen: flour, sugar, eggs and oil. With these ingredients we can make a cake or even fateer (unleavened bread) since the kitchen’s ‘genetic pool’ allows both types (i.e. one set of ingredients and different dishes).

Likewise, a species' genetic pool allows differences between its members. When Darwin visited the Galapagos Islands and observed the diversity of birds' beaks, he realized that the beaks differ according to the quality of the bird's main source of food in that when the bird's food is close to the soil surface (topsoil) the beak is small, while if the food is found in the deeper layer of the earth (subsoil) the beak is longer.



Darwin thought that these changes happened through evolution (mutations). His extensive study of the Galapagos finches helped shape his theory of evolution through natural selection, which is now most often associated with macroevolution. Macroevolution was the type of evolution

Darwin described in his time wherein he proposed that species changed over time in morphology and anatomy. Genetics and microevolution were not discovered until after Darwin died, that is scientists have not come to understand the structure of the genetic pool until a full century after Darwin published his book *On the Origin of Species*. If Darwin had knew about the genetic pool, he would have known that the different beak shapes are, in fact, the result of adaptations within the same bird population. Again, an adaptation is a way an organism changes as it responds to changes in its environment, and each species has DNA sequences that code for all of the available traits that can be passed down to the next generation. Therefore, the genetic code of this type of birds allows different forms of beaks. Their DNA cells carry a code for a protein called bone morphogenetic protein 4 (Bmph4). The gene for this protein encodes for all types of beaks during the embryonic stage and according to its later activity gives a protein necessary to form a given beak. In short, the different beak shapes that Darwin observed reflect the genetic diversity of the same species (i.e. this bird species' genetic pool), but the concepts of genes, the genetic pool, and the genetic code were unknown to scientists at Darwin's time. In fact, Darwin relyed on naked-eye first-hand observation (v.s aided sophisticated observation). So he mistakenly thought that the genetic pool adaptations (like cake and unleavened bread made from the same set of ingredients in the same kitchen in the previous analogy) are an evolution. Unfortunately, evolutionists still promote the same Darwinian myth to this day, although we know for a fact that all these adaptations are differences between the members of the same species. Nonetheless, they refer to them as 'microevolution', suggesting the possibility of a 'macroevolution', that is the emergence of a new species.

Indisputably, the poof that microevolution does not lead to macroevolution is that thousands of years of breeding different species has not led to completely new species being formed. The irony is that even evolutionists admit that we have never observed any speciation. However, proponents for the idea that microevolution leads to macroevolution point out that not enough time has gone by in the scheme of the history of life on Earth to show if microevolution does lead to macroevolution. They claim that we can see new strains of bacteria forming because the life span of a bacterium is very short. However, the biological definition of species does not apply because new strains of bacteria are asexual.

A book entitled *Specious Speciation: The Myth of Observed Large-Scale Evolutionary Change*. This book is Casey Luskin's response to The Talk Origins Speciation FAQ, titled "Observed Instances of Speciation" which claims it discusses several instances where speciation

has been observed. For years, this FAQ has been cited by pro-Darwin internet debaters as allegedly demonstrating that neo-Darwinian evolution is capable of producing significant biological change. However, Luskin asserts that an analysis of the technical literature regarding many of the examples discussed in the FAQ reveals that such claims are clearly incorrect. His assessment finds that not one of the examples demonstrates the origin of large-scale biological change. Luskin argues that the vast majority of the examples do not even show the production of new species, where a "species" is defined according to the standard definition of a "reproductively isolated population." He further explains that only one single example shows the production of a new species of plants via hybridization and polyploidy, but this example does not entail significant biological change, and is overturned by a later study not mentioned in the FAQ.

In a nutshell, Luskin argues that while most of the FAQ's discussions of the papers it cites are reasonably accurate, these papers amount to citation bluffs if evolutionists are claiming to discuss several instances where speciation has been observed. Hence, people who believe that this FAQ demonstrates that Darwinian processes can produce large-scale biological change have been badly misled because the examples in the FAQ are ultimately used to make inaccurate claims, and the FAQ's title, "Observed Instances of Speciation," is unwarranted. All in all, Luskin's primary finding is that none of the examples demonstrate that Darwinian evolution is capable of causing large-scale evolutionary change and his secondary finding is that the vast majority of the examples do not even meet the standard definition of "speciation.''To conclude, adaptations have nothing to do with evolution. For example, the genetic pool allows nylon-eating bacteria to acquire the property of eating nylon when nylon is available to them, and to resist antibiotics…etc.

Antibiotic resistance happens when germs like bacteria develop the ability to defeat the drugs designed to kill them, that is to say the germs are not killed and continue to grow. Actually, resistance is not really new and most likely such processes as inter-microbial transfer of plasmids containing resistance genes (R factors), conjugation, transformation, and transduction have existed in nature for thousands of years. One of the most convincing studies that demonstrate that bacteria become resistant to antibiotics through "old" genes present in the past was published in 1988. In that study, individual bacteria from the intestines of explorers who had been frozen before the development of antibiotics were shown to already be resistant to several antibiotics that had not been developed until after the explorers were frozen. Thus the

genes that produced resistance were already there. Thus, it is very likely that kind of antibiotic resistance has been in nature for a long time.

In fact, antibiotic resistance is one of the so-called facts of evolution. However, creation scientists explain that it is indeed a fact of change, but not one of real evolution (i.e. neo-Darwinian evolution). Basically, exposure of a bacteria population to a specific antibiotic whether in a person or in a Petri dish will kill antibiotic sensitive bacteria, but not those that happen to have R plasmids to counteract that antibiotic. According to the theory of natural selection, biologists predict that under these circumstances the bacteria carrying genes for antibiotic resistance will increase. Indeed, the development of antibiotic resistance by bacteria happens frequently and evolutionists point to it as a demonstration of evolutionary change. However, according to creation microbiologists, molecular analysis of the genetic events that lead to antibiotic resistance do not support this common assumption because many bacteria become resistant by acquiring genes from plasmids or transposons via horizontal gene transfer which accounts only for the spread among bacteria and not for the origin of resistance genes. They argue that mutations, on the other hand, can potentially account for the origin of antibiotic resistance within the bacterial world. However, such mutations involve mutational processes that are contrary to the predictions of evolution because they consistently reduce or eliminate the function of transport proteins, protein binding affinities, enzyme activities, and/or regulatory control systems. In other words, while such mutations can be regarded as beneficial, in that they increase the survival rate of bacteria in the presence of the antibiotic, they involve mutational processes that do not provide a genetic mechanism for "descent with modification." Creation microbiologists go on to demonstrate how some "fitness" cost is often associated with mutations, although reversion mutations may eventually recover most, if not all, of this cost for some bacteria. According to these scientists, biological cost does occur in the loss of pre-existing cellular systems or functions. Hence, such loss of cellular activity cannot legitimately be offered as a genetic means of demonstrating evolution, but is rather evidence of devolution.

In layman's terms, antibiotic resistance happens in different ways. For example, the bacteria may lose a part of of their DNA that stores their information and codes for their traits. In other words, the bacteria change their structures so they still function exactly as they did before but so the antibiotic does not recognize them. The most famous example of this is the malaria parasite which lost a portion of its DNA as a form of antibiotic resistance in that when doctors stopped prescribing chloroquine the newly resistant strains disappeared and the original strains

reappeared. Unquestionably, this partial DNA loss is an instance of devolution rather than evolution.

The Journal of
Infectious Diseases

Chloroquine-Resistant Malaria FREE

Thomas E. Wellems ✉, Christopher V. Plowe

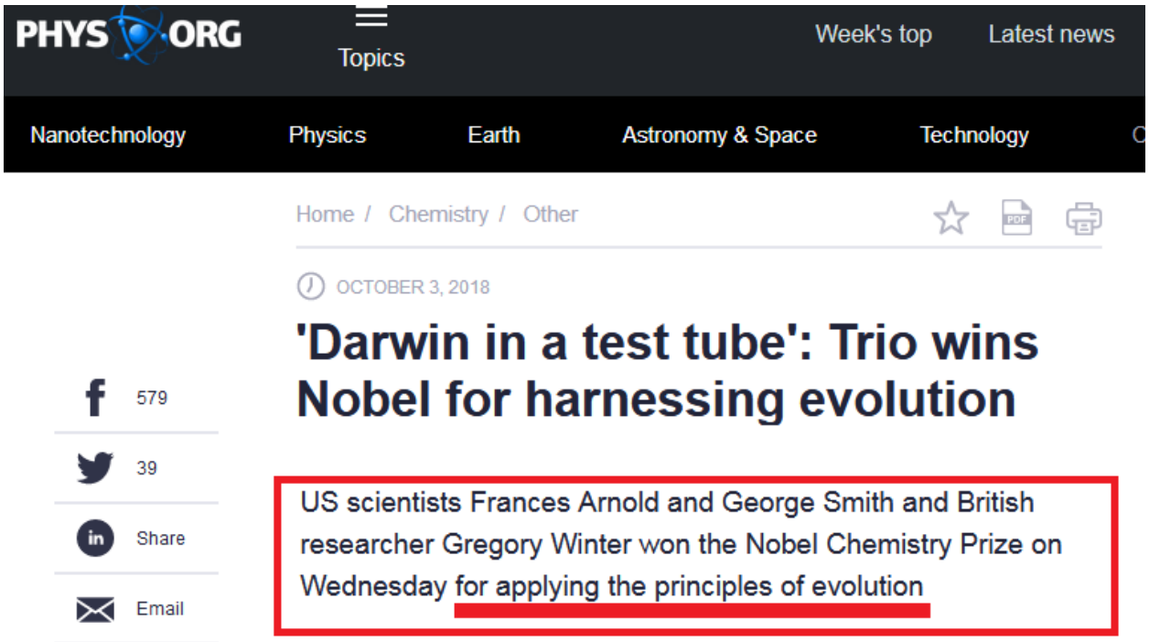
Although the data associating PfCRT mutations and chloroquine resistance are strong, they do not prove causality, and additional evidence for the central role of PfCRT in resistance has been required. Genetic complementation experiments supply some of this evidence. Transfection of clone 106/1 and of 2 additional chloroquine-sensitive lines with plasmid constructs expressing resistant forms of *pfcrt* yielded transformed lines that grew at drug concentrations tolerated only by naturally chloroquine-resistant *P. falciparum*. In the same experiments, stepwise chloroquine pressure on the transformed 106/1 parasites eventually selected a resistant line that had lost the transfected DNA and had undergone a single K76I point mutation in the PfCRT encoded by the endogenous (chromosomal) gene. The selection of this new K76I mutation on the background of mutations already present elsewhere in PfCRT provides additional support for a determining role of residue 76 in chloroquine resistance [26]

31. Did not chemical evolution take the 2018 Nobel Prize in Chemistry?

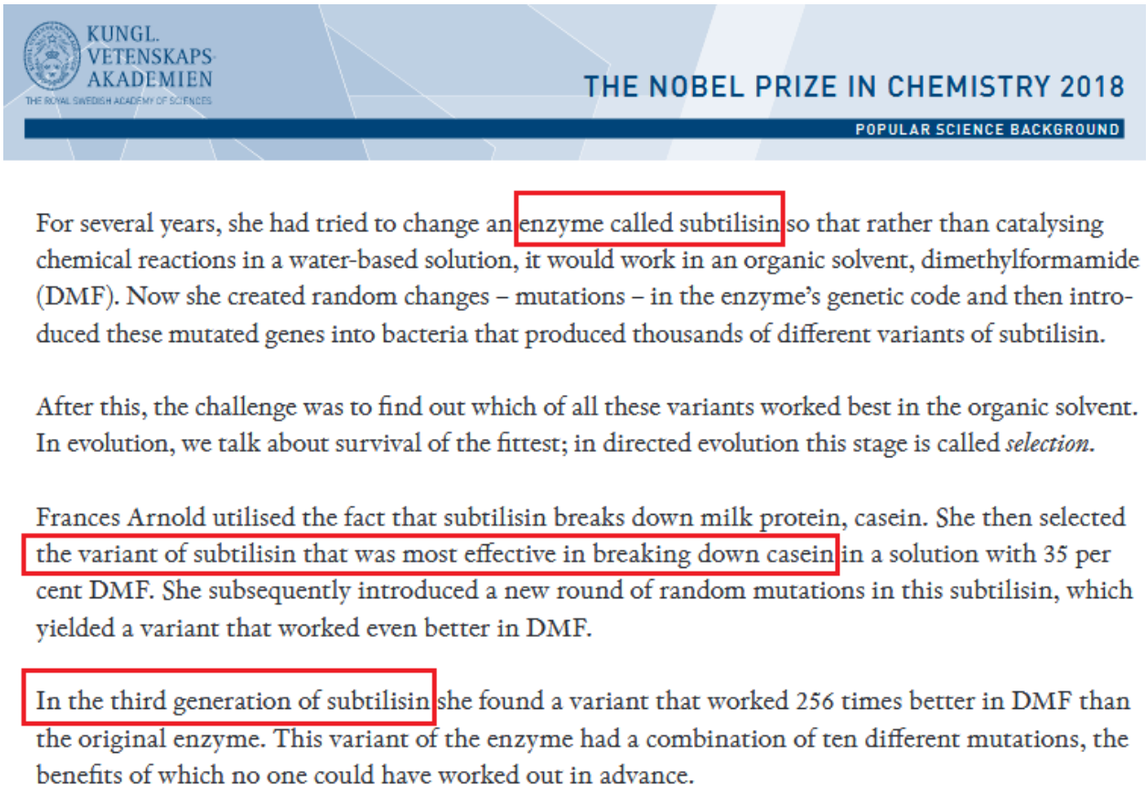
Indeed, Frances H. Arnold, George P. Smith and Sir Gregory P. Winte won the 2018 Nobel Prize in Chemistry for directing evolution in a test tube. These three scientists have sped up evolutionary changes in the lab, harnessing a process that can take millions of years in the natural world and using it—in months or weeks—to make novel molecules.[58]

[58]Https://www.youtube.com/watch?v=6ecpiWFOCvU (2:07—2:20)

‘‘What they have done is to really speed up the evolution. This nature has had billions of years, but now you want the process to be possible maybe in a few weeks or a year or something in the laborator.’’ Sara Linse, member of the Chemistry Nobel Prize Committee.



These chemists have applied the principles of Darwin in test tubes in that they have used the molecular understanding they have of the so-called evolutionary process and recreated it in their labs, and they have been able to make evolution many 1000s of times faster. The irony is that not one species of microbes evolved into another and not a single new functional protein or enzyme appeared. The only thing that was observed is that a variant in the third generation of an enzyme called subtilisin became more effective at breaking the milk protein (casein). In other words, though it underwent a slight variation, the subtilisin enzyme was sill the same in the first, second and third generation (i.e. the same enzyme within the same microbal species and family).


KUNGL. VETENSKAPS AKADEMIEN
THE ROYAL SWEDISH ACADEMY OF SCIENCES
THE NOBEL PRIZE IN CHEMISTRY 2018
POPULAR SCIENCE BACKGROUND
For several years, she had tried to change an enzyme called subtilisin so that rather than catalysing chemical reactions in a water-based solution, it would work in an organic solvent, dimethylformamide (DMF). Now she created random changes – mutations – in the enzyme's genetic code and then introduced these mutated genes into bacteria that produced thousands of different variants of subtilisin.
After this, the challenge was to find out which of all these variants worked best in the organic solvent. In evolution, we talk about survival of the fittest; in directed evolution this stage is called *selection*.
Frances Arnold utilised the fact that subtilisin breaks down milk protein, casein. She then selected the variant of subtilisin that was most effective in breaking down casein in a solution with 35 per cent DMF. She subsequently introduced a new round of random mutations in this subtilisin, which yielded a variant that worked even better in DMF.
In the third generation of subtilisin she found a variant that worked 256 times better in DMF than the original enzyme. This variant of the enzyme had a combination of ten different mutations, the benefits of which no one could have worked out in advance.

In short, the different variants observed were changes within the same enzyme species. The results of applying the principles of evolution in a lab were published on the Nobel Prize website.

For several years, she had tried to change an enzyme called subtilisin so that rather than catalysing chemical reactions in a water-based solution, it would work in an organic solvent, dimethylformamide (DMF). Now she created random changes – mutations – in the enzyme's genetic code and then introduced these mutated genes into bacteria that produced thousands of different variants of subtilisin.

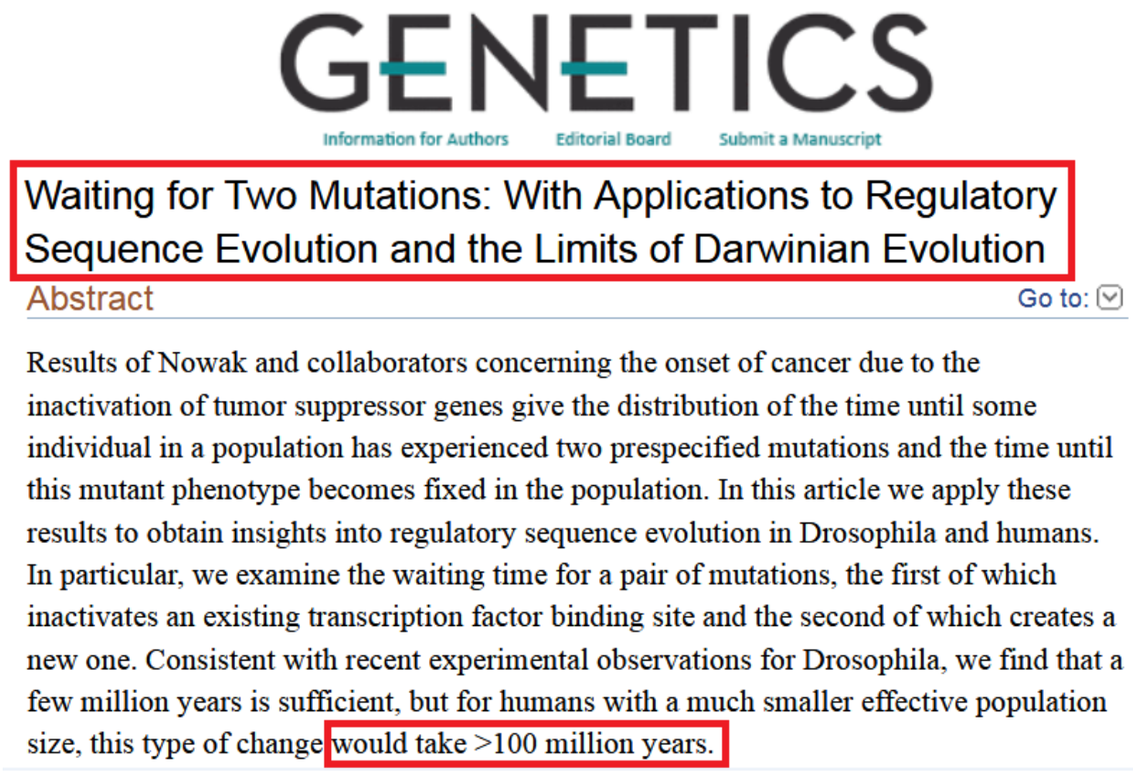
More importantly, it turned out that the modified enzyme which resulted from the repeated mutations was the fittest and most effective for our use of it only, such as in biofuels. However, it has become poor and weak for the organism, and its lifespan was shorter compared to the natural enzyme that did not mutate .[59] Hence, it is logical and fair to say that evolution did not work. Jerry Fodor and Massimo Piattelli Palmarini, two Darwinist atheists and co-authors of the book *What Darwin Got Wrong*, started the book with the statement: ''the theory is flawed. This is not a book about God, or intelligent design, or creation, for neither of us is involved in any of that. We have decided that it is advisable to clarify this from the beginning, because our basic opinion is that there is some mistake in the theory and perhaps a fatal mistake.''[60]

32. How much time, according to the probability theory, would it take to fix two useful mutations in one generation?

To begin with, a gene has achieved fixation when its frequency has reached 100% in the population. At that stage, all individuals are homozygous for that allele until a new mutation arises. The fixation probability, the probability that the frequency of a particular allele in a population will ultimately reach unity, is one of the cornerstones of population genetics. According to a study published in *Genetics*, scientists calculated the probability of fixation of beneficial mutations and found that it would take up to a few million years to fix two beneficial

[59]Douglas Axe: ''Modified enzymes are poor, weak things compared to natural enzymes even with the best of protein engineers' efforts.''
[60]Fodor, J. and Piattelli Palmarini, M., *What Darwin Got Wrong*, p. 15 as cited in William A. Dembski and Jonathan Wells, *The Design of Life: Discovering Signs of Intelligence in Biological Systems*, translated by Mu'min Al-ḥassan, Muḥammad Al-qadhī and Mussa Idrīs, (Riyadh: Dār Al-Kātib li An-nashr wa At-tawzi', 2014), p. 10.

mutations in one generation in Drosophila (a species often referred to as the fruit fly), while this type of change would take more than a hundred million years in humans.


GENETICS

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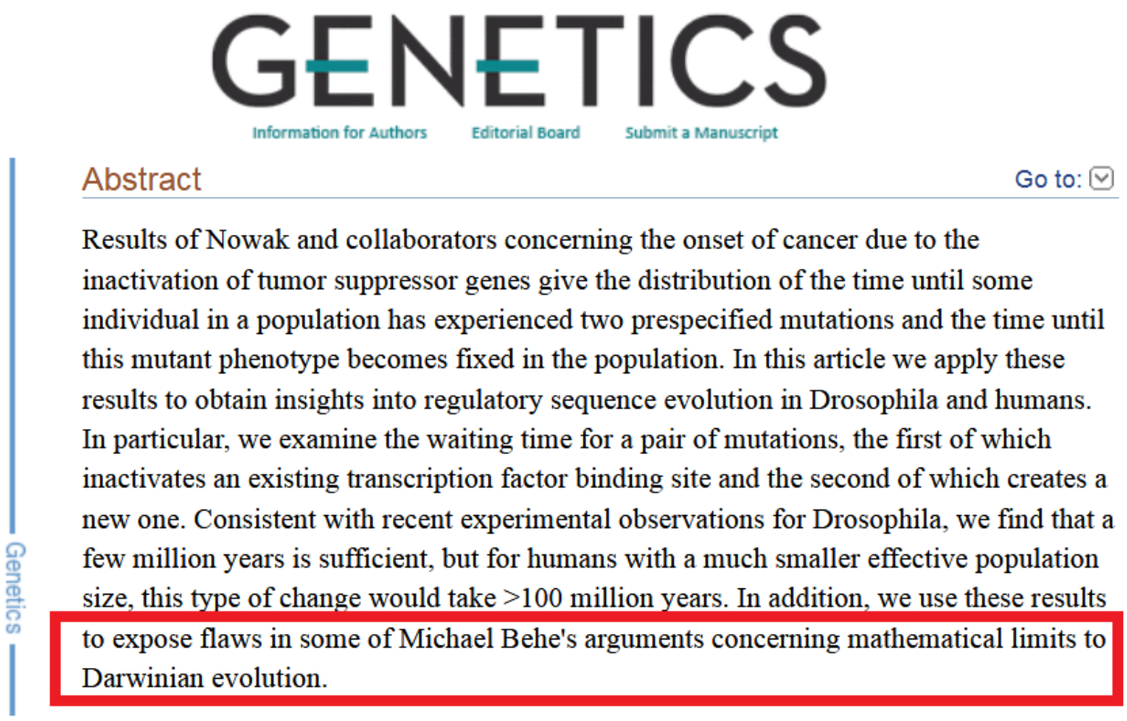
Waiting for Two Mutations: With Applications to Regulatory Sequence Evolution and the Limits of Darwinian Evolution

Abstract Go to:

Results of Nowak and collaborators concerning the onset of cancer due to the inactivation of tumor suppressor genes give the distribution of the time until some individual in a population has experienced two prespecified mutations and the time until this mutant phenotype becomes fixed in the population. In this article we apply these results to obtain insights into regulatory sequence evolution in Drosophila and humans. In particular, we examine the waiting time for a pair of mutations, the first of which inactivates an existing transcription factor binding site and the second of which creates a new one. Consistent with recent experimental observations for Drosophila, we find that a few million years is sufficient, but for humans with a much smaller effective population size, this type of change would take >100 million years.

Ironically, this study was conducted in response to the critics and skeptics of evolution.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Essentially speaking, science makes it clear that evolution is biologically impossible because it would take more than a hundred million years in order for two beneficial mutations to achieve fixation for humans. And since there are more than sixty million mutations between humans and the alleged common ancestor, Australopithecus africanus (meaning southern ape of Africa), we would need many times as much as the age of the universe itself in order for one new

species to emerge. Lynn Margulis and Dorion Sagan, two scientists in evolutionary biology, admitted in a scientific report: ‘‘we have not been able to trace direct evidence of the emergence of a new species, whether in the remote Galapagos Islands, or in the fruit fly laboratories, or in sediment accumulations.’’[61] Again, the convincing and conclusive evidence of evolution is still missing and what scientists observed was changes within the same species. For instance, the increase in peppered moths during the industrial revolution was just a simple color variation within the same moth species.

The British peppered moths are one of the most well-known icons of evolutionary theory. For those readers who are not familiar with the background, let us begin with a summary. It all has to do with a claimed phenomenon labelled ‘industrial melanism’. In fact, peppered moths come in two forms, one of which is called the typical form, which is ash-grey in colour, with black pepper-like patterns and the other form is the darker, so-called carbonaria. The lighter-coloured moths could camouflage themselves on lichen-covered tree trunks, whereas the darker ones were more easily picked off and eaten by birds because they were more visible on the trunks. Pollution from the Industrial Revolution in England killed off the lichens on the tree trunks, exposing the darker-coloured bark. Once this happened, the darker-coloured moths had the advantage of camouflage, so then they survived more readily, while the lighter-coloured ones were more likely to be eaten by the birds. After 1950, pollution controls cleared the air, allowing lichen to grow back on the trees. Thus, the lighter moths made a comeback. Evolutionists claimed that the peppered moths are a valid example of evolution because a ‘recent mutation’ is responsible for dark colour in the peppered moths. However, this evolutionary story is full of problems. In summary, since the genetic information is already present in the moth populations from the start of these observations, the shift in the ratio of light and dark moths is a case of only natural selection, but not evolution. As creationists have often pointed out, this natural selection does not add up to evolution from simple organisms to humans because all that is happening is that the frequency of gene variants are changing over time. In other words, no new gene variants are being created, which is absolutely necessary for evolution. The fact that the darker-coloured moths declined after 1950 with cleaner air contradicts the idea that the peppered moths are evolving into an entirely new species, let alone a completely different kind of insect, given

[61]Margulis Lynn & Sagan Dorion, *Aqcuiring Genomes: A Theory of the Origins of Species*, p. 32 as cited in William A. Dembski and Jonathan Wells, *The Design of Life: Discovering Signs of Intelligence in Biological Systems*, translated by Mu'min Al-ḥassan, Muḥammad Al-qadhī and Mussa Idrīs, (Cairo: Dār Al-Kātib li An-nashr wa At-tawzi', 2014), p152.

enough time. Simply, the moths have always remained moths, shifting back and forth in response to the environment. It is noteworthy that evolutionists have been working hard for decades to develop an effective argument that the peppered moths prove evolution, so they can use it as a weapon to try to debunk creation. However, due to the many holes in the experiments, Jerry Coyne, who is renowned as a defender of evolution against proponents of intelligent design, suggested discarding the peppered moths as a well-understood example of natural selection in action.

Analogously, genetic engineering sciences have currently provided us with abundant beef cattle and protein rich corn, but cattle are still cattle and corn is still corn. In other words, there are some genetic changes going on through mutations and gene drift, but there is no way any species is ever going to turn into another. Again, there is absolutely zero chance that this is ever going to happen, even if we add billions of years. Incontestably, when scientists use operational science—the kind involving observable, repeatable, testable results—they have never observed, repeated, or been able to test a species turning into another—at all. In fact, diversity has been exhausted to the maximum in many of the living organisms to the point where no further changes are possible in them, and yet no new species has ever emerged.[62] Therefore, a group of biologists published an article in the Journal of *Evolutionary Developmental Biology* stating that ‘‘genetic engineering can result in changes that allow adaptation to the environment, but this does not mean the emergence of the fittest, and it seems that the origin of the species—Darwin's problem—remains an unsolved problem.’’[63] In short, evolutionary theory has been and will remain a hope fighting vigorously against empirical and observational data. In other words, evolution is not even scientifically viable and describing it as a theory in the absence of established evidence is a problem for, as the Nobel Prize-winning scientist Ernst Chain says: ‘‘it can hardly be called a theory.’’[64]

33. Is it true that human chromosome 2 is a result of an end-to-end fusion of two ancestral chromosomes?

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[62]William A. Dembski and Jonathan Wells, *The Design of Life: Discovering Signs of Intelligence in Biological Systems*, translated by Mu'min Al-ḥassan, Muḥammad Al-qadhī and Mussa Idrīs, (Riyadh: Dār Al-Kātib li An-nashr wa At-tawzi', 2014).

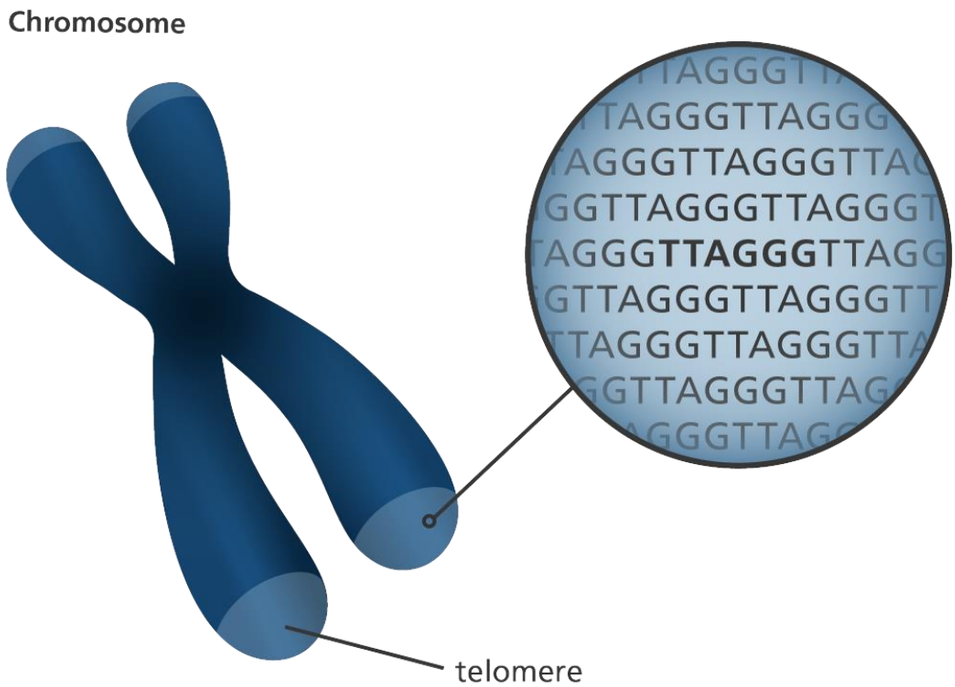
[63] Gilbert. F. Scott, Opitz. M. John, Raff. A. Rudolf, ‘‘Resynthesizing Evolutionary and Developmental Biology’’, *Developmental Biology Magazine*, Vol 173, P. 357-372.

[64] Clark. R. William: *The Life of Ernst Chain*, p. 147 as cited in Sami Al-Amiri, *Barāhin Wujūd Allah (Evidences for the Existence of God)*, (Dammam: Markaz Takween li Ad-dirassāt wa Al-abhāth, 2018), p. 536.

People have 23 pairs of chromosomes, for a total of 46 chromosomes and most apes have 24 pairs of chromosomes, for a total of 48 chromosomes. According to evolutionists, one very popular piece of genetic evidence for the idea that humans and apes have a common ancestor is that human chromosome 2 looks like two chimpanzee chromosomes that have been stitched together. As the evolutionary story goes, the common ancestor between apes and humans had 24 pairs of chromosomes, and it initially passed them to those animals that began evolving into apes and humans. The apes kept that number of chromosomes, but after the human lineage split off from the chimpanzee lineage, something happened to fuse two of the chromosomes, leading to only 23 pairs of chromosomes in humans. Now, is this a scienctific fact or a metaphysical claim? In experimental science, the claim that humanity must have shared the same parent species (last common ancestor) at some point in prehistory with its sister species (chimpanzees) needs to be examined to verify its validity. However, evolutionists put the premise that humans and chimpanzees have a common ancestor in their minds, and then they direct the research towards this conclusion. This is the fallacy of begging the question (also called arguing in a circle) which occurs when the proponents of an argument assume the truth of the conclusion, instead of supporting it. In other words, evolutionists, in this case, assume without proof that human chromosome 2 is a result of an end-to-end fusion of two ancestral chromosomes. Quite simply, if the issue is in the number of chromosomes, we can claim that humans and potatoes have one common ancestor because the potato plant, just like chimpanzees, possesses exactly 48 chromosomes. So why suggest the chimpanzees and not potatoes? Also, the guppy (Poecilia reticulata), one of the most popular freshwater aquarium fish species, have the exact same number of chromosomes as human beings, i.e 46 chromosomes, so again why chimpanzees and not guppies?

Now, let us assume that the first human being and his children had 48 chromosomes, and suddenly a fusion of two chromosomes occurred in one of his grandchildren. Then contemporary human lineage descended from this grandchild who had 46 chromosomes. Is there a mistake in this scenario? Can you scientifically prove the validity of the scenario assumed by evolutionists, or prove the non-validity of mine? Basically, my scenario is more likely according to Occam's razor, a scientific and philosophical rule that entities should not be multiplied unnecessarily which is interpreted as requiring that the simplest of competing theories be preferred to the more complex or that explanations of unknown phenomena be sought first in terms of known quantities.

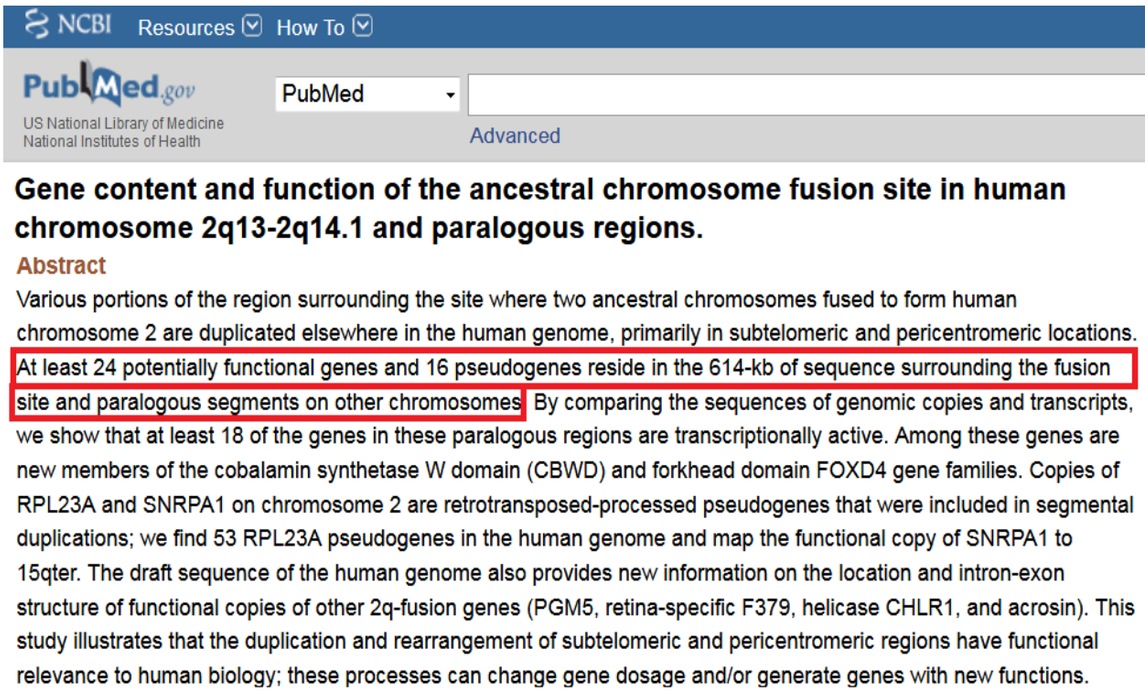
Back to our central question: did fusion occur in human chromosome 2? This question was put forward before 2003, but the completion of the Human Genome Project gave scientists the ability, for the first time, to read nature's complete genetic blueprint for building a human being. Scientists, thus, know exactly the sequences of letters in human chromosome 2. Evolutionists claim that they found an actual DNA signature of a possible fusion event. Actually, they refer to a small, muddled cluster of telomere-like end sequences on human chromosome number 2 that vaguely resembled a possible fusion. Telomeres are a six-base sequence of the DNA letters TTAGGG repeated over and over again at the ends of chromosomes which protect the chromosome ends from damage. Evolution skeptics argue that the problem is the small size of the fusion site, which is only 798 DNA letters long. They explain that telomere sequences at the ends of chromosomes are 5,000 to 15,000 bases long. Therefore, if two chromosomes had fused, we should see a fused telomere signature of 10,000 to 30,000 bases long—not 798. All in all, even advocates of the chromosomal fusion hypothesis admit that that there is no evidence for a telomere-rich fusion site.[65]



Another remarkable anti-evolutionary finding about the fusion site is its location and what it actually does. A detailed analysis of the bases of DNA sequence surrounding the alleged fusion site show that it was located inside a gene which is an oddity. Actually, the location of the so-called fusion sequence inside a functional gene associated with the genetics of

[65]Fairbanks Daniel, *Relics of Eden: The Powerful Evidence of Evolution in human DNA*, (Amherst, NY: Prometheus, 2007)

a variety of cellular processes strongly refutes the idea that it is the accidental byproduct of a head-to-head telomeric fusion since genes are not formed by catastrophic chromosomal fusions. According to scientists, what is even more amazing is that the fusion site is itself functional and serves an important engineered purpose in that it actually acts as a switch for controlling gene activity. In this respect, a wealth of biochemical data showed that 12 different proteins called transcription factors regulate this segment of the gene. Besides, the actual process of transcription initiates inside the region of the so-called fusion site. Hence, as scientists put it, the activity in the alleged fusion site could be called a promoter region. In short, it is really hard to understand how two chromosomes could fuse at the intron of a functional gene, but that is not the end of the story because the fusion site also contains an important sequence of DNA called a transcription factor binding site. In other words, not only is the fusion site right in the middle of a functional gene, it is actually found in a region that helps to regulate how that gene is expressed. Hence, that makes it even more difficult to understand how a fusion event could have taken place there. Interestingly, these are the findings of a study that was conducted as part of a research that aims to defend the theory of evolution.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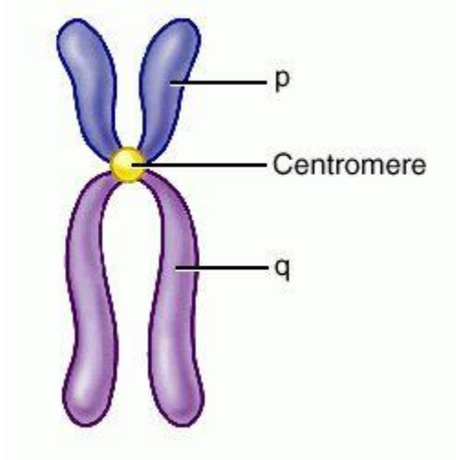
Gene content and function of the ancestral chromosome fusion site in human chromosome 2q13-2q14.1 and paralogous regions.

Abstract

Various portions of the region surrounding the site where two ancestral chromosomes fused to form human chromosome 2 are duplicated elsewhere in the human genome, primarily in subtelomeric and pericentromeric locations. At least 24 potentially functional genes and 16 pseudogenes reside in the 614-kb of sequence surrounding the fusion site and paralogous segments on other chromosomes. By comparing the sequences of genomic copies and transcripts, we show that at least 18 of the genes in these paralogous regions are transcriptionally active. Among these genes are new members of the cobalamin synthetase W domain (CBWD) and forkhead domain FOXD4 gene families. Copies of RPL23A and SNRPA1 on chromosome 2 are retrotransposed-processed pseudogenes that were included in segmental duplications; we find 53 RPL23A pseudogenes in the human genome and map the functional copy of SNRPA1 to 15qter. The draft sequence of the human genome also provides new information on the location and intron-exon structure of functional copies of other 2q-fusion genes (PGM5, retina-specific F379, helicase CHLR1, and acrosin). This study illustrates that the duplication and rearrangement of subtelomeric and pericentromeric regions have functional relevance to human biology; these processes can change gene dosage and/or generate genes with new functions.

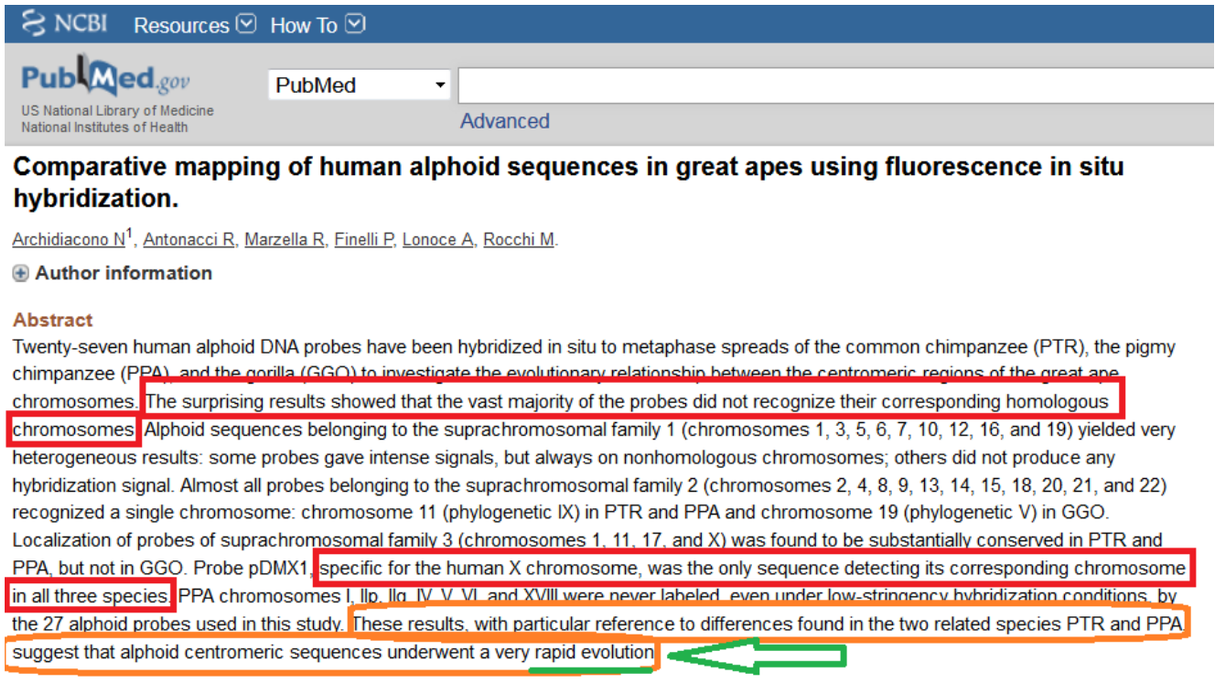
Additionally, Darwin skeptics explain that another key problem with the fusion model is the lack of viable evidence for a signature of an extra centromere region. Actually, centromeres are sections of chromosomes, often in central locations, that play key roles during cell division.



Quite simply, the newly formed chimeric chromosome would have had two centromere sites immediately following the alleged head-to-head fusion of the two chromosomes. In such a case, one of the centromeres would be functional while the other would be disabled because the presence of two active centromeres is bad news for chromosomes and would lead to dysfunction and cell destruction. Interestingly, the evidence for a cryptic (disabled) centromere on human chromosome 2 is very weak. Evolutionists explain the lack of a clearly distinguishable nonfunctional secondary centromere by arguing that a second centromere would have been rapidly selected against and that the disabled centromere would have deteriorated over time since there were no functional restraints placed on it anymore by its doing something useful in the genome. In other words, they claimed that the alphoid centromeric sequences underwent a very rapid evolution. However, the evidence for a second remnant centromere at any stage of sequence degeneration is problematic for the evolutionary paradigm. Actually, functional centromere sequences are composed of a repetitive type of DNA called alphoid sequences in that some types of alphoid repeats are found all over the genome, while others are specific to centromeres. However, the highly noteworthy finding is that the structure of the sequences found at the cryptic centromere site on human chromosome 2 does not match those associated with functional human centromeres. Moreover, what is even worse for the evolutionary model is that they are human-specific i.e. they have no highly similar counterparts in the chimp genome. In fact, a study showed that the centromere sequence found in chimpanzees and gorillas is not found in the alleged human chromosome 2 fusal site.

Furthermore, the alleged fossil centromere is also exceptionally tiny compared to a real one and there are three different regions of it that are not even alphoid repeats. But, the most serious evolutionary problem with the idea of a fossil centromere, according to evolution critics, is that like the alleged fusion site, it is positioned inside a gene and its sequence spans both intron

and exon regions of the gene. In fact, the part of the alleged fossil centromere sequence that lands inside an exon actually codes for amino acids in the resulting gene's protein. Hence, the fact that the so-called fossil or cryptic centromere is a functional region inside an important protein-coding gene completely refutes the idea that it is a defunct centromere.



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Comparative mapping of human alphoid sequences in great apes using fluorescence in situ hybridization.

Archidiacono N[1], Antonacci R, Marzella R, Finelli P, Lonoce A, Rocchi M.

Author information

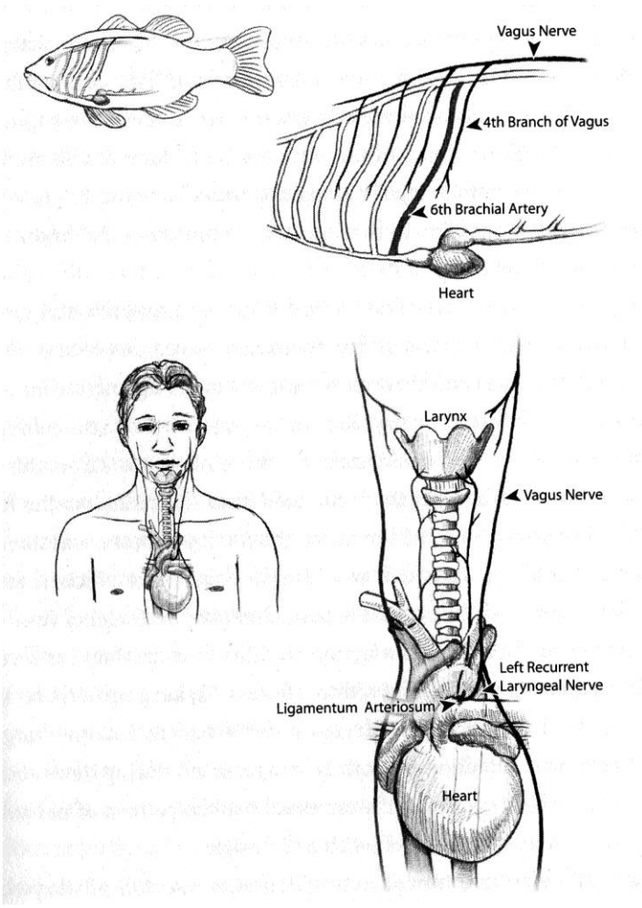
Abstract

Twenty-seven human alphoid DNA probes have been hybridized in situ to metaphase spreads of the common chimpanzee (PTR), the pigmy chimpanzee (PPA), and the gorilla (GGO) to investigate the evolutionary relationship between the centromeric regions of the great ape chromosomes. The surprising results showed that the vast majority of the probes did not recognize their corresponding homologous chromosomes. Alphoid sequences belonging to the suprachromosomal family 1 (chromosomes 1, 3, 5, 6, 7, 10, 12, 16, and 19) yielded very heterogeneous results: some probes gave intense signals, but always on nonhomologous chromosomes; others did not produce any hybridization signal. Almost all probes belonging to the suprachromosomal family 2 (chromosomes 2, 4, 8, 9, 13, 14, 15, 18, 20, 21, and 22) recognized a single chromosome: chromosome 11 (phylogenetic IX) in PTR and PPA and chromosome 19 (phylogenetic V) in GGO. Localization of probes of suprachromosomal family 3 (chromosomes 1, 11, 17, and X) was found to be substantially conserved in PTR and PPA, but not in GGO. Probe pDMX1, specific for the human X chromosome, was the only sequence detecting its corresponding chromosome in all three species. PPA chromosomes I, IIp, IIq, IV, V, VI, and XVIII were never labeled, even under low-stringency hybridization conditions, by the 27 alphoid probes used in this study. These results, with particular reference to differences found in the two related species PTR and PPA, suggest that alphoid centromeric sequences underwent a very rapid evolution

To conclude, Darwin skeptics believe that due to the muddled signatures and small sizes of the alleged fusion and fossil centromere sites, it is highly questionable that their sequence was evolutionarily derived from an ancient chromosome fusion. Moreover, they represent functional sequence inside genes in that the alleged fusion site is an important genetic switch and the so-called fossil centromere contains both coding and non-coding sequence inside a large protein-coding gene. This is an undeniable double whammy against the whole mythical fusion idea, utterly destroying its validity. The overwhelming scientific conclusion is that the fusion never happened.

34. Does the recurrent laryngeal nerve refute intelligent design? Is it an evolutionary proof that Man evolved from fish?

Essentially speaking, evolutionary biologists assert that intelligent design requires perfect design, whereas imperfect design is the mark of evolution. Thus, intelligent design creationism critics place evolution in a unique position to explain such examples of allegedly imperfect design. Actually, they state that if a design in nature is clearly inferior to what a human engineer could produce, then they are entitled to reject intelligent design. The recurrent laryngeal nerve (RLN) is an alleged example of this imperfect or inferior design.



As the evolutionary argument goes, the RLN innervates the larynx, but instead of running directly from the brain to the voice box, as one might expect, the nerve path travels down past the larynx, with the RLN branching off the vagus nerve down near the heart, then looping around the aorta and traveling back up the neck to innervate the larynx from below. Proponents of evolution call this extra distance the RLN takes to get to the larynx ‘‘one of nature’s worst designs.’’ Actually, they describe it as a very poor design for its intended purpose and some of them even assert that it is a ridiculous detour because, to borrow their words, no engineer would ever make a mistake like that. They go further and argue that the seemingly circuitous route of the nerve is easily explained if one understands that our body evolved from a fish body and must operate under those constraints. Indeed, the evolutionists are basing their arguments upon scientists’ ignorance of developmental biology (i.e. there is a lot that science still does not understand about development) instead of facts. Without a doubt, when we consider their claims which enjoy no evidence we can easily know the difference between true science and pseudoscience, and between the holder of evidence and a clown.

To begin with, the superior laryngeal nerve is a branch of the vagus nerve which, by comparison with the recurrent laryngeal nerve, takes a more direct route on the way to the

cricothyroid muscles (i.e. it exits the brain and enters directly into the larynx). We can therefore infer that the route of the laryngeal nerve gives it unique and specific functions. Besides, pro-intelligent design biologists explain that observed variation within humans implies that the so-called evolutionary constraints do not exist because the fact is that even in humans in 0.3 to 1% of the population the right recurrent laryngeal nerve is indeed shortened and the route abbreviated in connection with a retromorphosis of the forth aortic arch. However, this is an unusual anomaly called the 'non-recurrent' laryngeal nerve. In this condition only the right side is affected and it is always associated with an abnormal growth of the right subclavian artery from the aortic arch on the left side. Interestingly, it can have catastrophic consequences for the persons so affected, specifically problems in deglutition (difficulties in swallowing) and respiratory difficulties (troubles in breathing). Therefore, the fact that there is some benefit to the current design implies that it is not ''imperfect'' after all. In other words, there is actually a design advantage to the course of the recurrent nerves, whereas the model that evolutionists deem the 'fittest' is an anomaly which causes a pathological condition.

2. The fact is that even in humans in 0.3 to 1% of the population the *right* recurrent laryngeal nerve is indeed shortened and the route abbreviated in connection with a retromorphosis of the forth aortic arch. ("An unusual anomaly … is the so-called 'non-recurrent' laryngeal nerve. In this condition, which has a frequency of between 0.3 – 1%, only the right side is affected and it is always associated with an abnormal growth of the right subclavian artery from the aortic arch on the left side" – Gray's Anatomy 2005, p. 644.; see also Uludag et al. 2009 http://casereports.bmj.com/content/2009/bcr.10.2008.1107.full; the extremely rare cases (0.004% to 0.04%) on the left side appear to be always associated with *situs inversus*, thus still "the right side"). Nevertheless, even in this condition its branches still innervate the upper esophagus and trachea (but to a limited extent?). Although this variation generally seems to be without severe health problems, it *can* have catastrophic consequences for the persons so affected: problems in deglutition (difficulties in swallowing) and respiratory difficulties (troubles in breathing) (see Rammerstorfer 2004; moreover "**dysphagia** (if the **pharyngeal and oesophageal branches** of nonrecurrent or recurrent inferior laryngeal nerve are injured)" – Yang et al, 2009: http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=5868576).

Moreover, intelligent design advocates assert that the argument that the anatomy of the recurrent laryngeal nerve is evidence for bad design fails on many levels because while it is impossible to get into the mind of the designer (God) and though scientists still do not understand everything about development, it is equally clear that the RLN's pathway allows it to serve a variety of functions. Indeed, there is solid positive evidence for multiple important functions of the RLN. Basically, the recurrent laryngeal nerve supplies sensation to the larynx below the vocal cords, gives cardiac branches to the deep cardiac plexus, and branches to the trachea, esophagus and the inferior constrictor muscles.

Furthermore, the Darwinist argument that the relationship between the recurrent nerves and the aortic arch is evidence of bad design fails to take into account the enormous

complexities of embryonic development. Intelligent design advocates explain that the design wisdom of the anatomy of the recurrent nerves can only be judged by someone who knows all of the design specifications necessary for that region of the human body and when it comes to that, they assert, even the best embryologists are pre-schoolers. Actually, other benefits of the RLN during the fetal stage were also discovered.

In sum, the RLN is clearly performing many jobs, not just one and its intended function is much more than simply innervating the larynx. In fact, the larynx is innervated directly, exactly as intelligent design-critics say it should be. Therefore, the argument against intelligent design of the RLN has collapsed because if anything is clear here, it is that the RLN is definitely not a very poor design for its intended purpose as evolutionists claim.

35. Do endogenous retroviruses (ERVs) support common ancestry?

According to Darwin, we share certain features with other organisms because of common ancestry rather than common design. Even though the science of genetics revolutionized Darwinian evolution, some old ideas persisted within neo-Darwinism with a twist in that instead of looking for visible features that organisms share in common, secular scientists are looking for DNA sequences that organisms share in common. Therefore, one of these evidences that evolutionists commonly cite is called Endogenous Retroviruses (ERVs). Basically, among the variation of viruses that exist is a subset of viruses known as retroviruses. The claim to fame for all retroviruses is that they modified what is known as the Central Dogma of Molecular Biology which says that DNA is converted to RNA, which is converted to protein. So, retroviruses modified the Central Dogma by demonstrating a method of converting RNA into DNA using the enzyme reverse transcriptase. In fact, one of the unique features of retroviruses is their ability to integrate into the host genome and remain there for long periods of time (possibly even permanently). Typically, retroviruses exist outside of us and spread from one person to another (exogenously). This is how retroviruses often work, but there is a significant proportion of retroviruses that remain inside of cells which are referred to as endogenous retroviruses. So an Endogenous Retrovirus (ERV) is a piece of DNA found inside an organism’s genome that looks like a retrovirus. ERVs have particular DNA sequences that molecular biologists can use to identify them. Evolutionists often cite them as supposed evidence of common ancestry because some ERVs seem to match the standard phylogeny of higher primates. Actually, they regard

endogenous retroviruses as parasitic junk sequences in our genome that were derived from viral DNA.

To begin with, one important aspect of ERVs that garners a lot of attention is that ERVs can be found in the exact same location in the genome across a variety of species. Evolutionists combine this fact with their preconceived ideas of common ancestry and come up with the idea that ERVs demonstrate evolution. In other words, evolutionists cite ERVs as evidence "proving" that evolution is true since certain ERVs are found in the exact same location across the genome of "evolutionarily related" species. However, ERVs, in and of themselves, do not prove evolution any more than they prove creation because evidence does not speak for itself and part of the scientific method demands interpretation. In other words, since every scientist has to interpret the evidence, their interpretation bias affects what they say about origins. Nonetheless, there are several arguments opposing the evolutionary fairy tale that ERVs prove common ancestry.

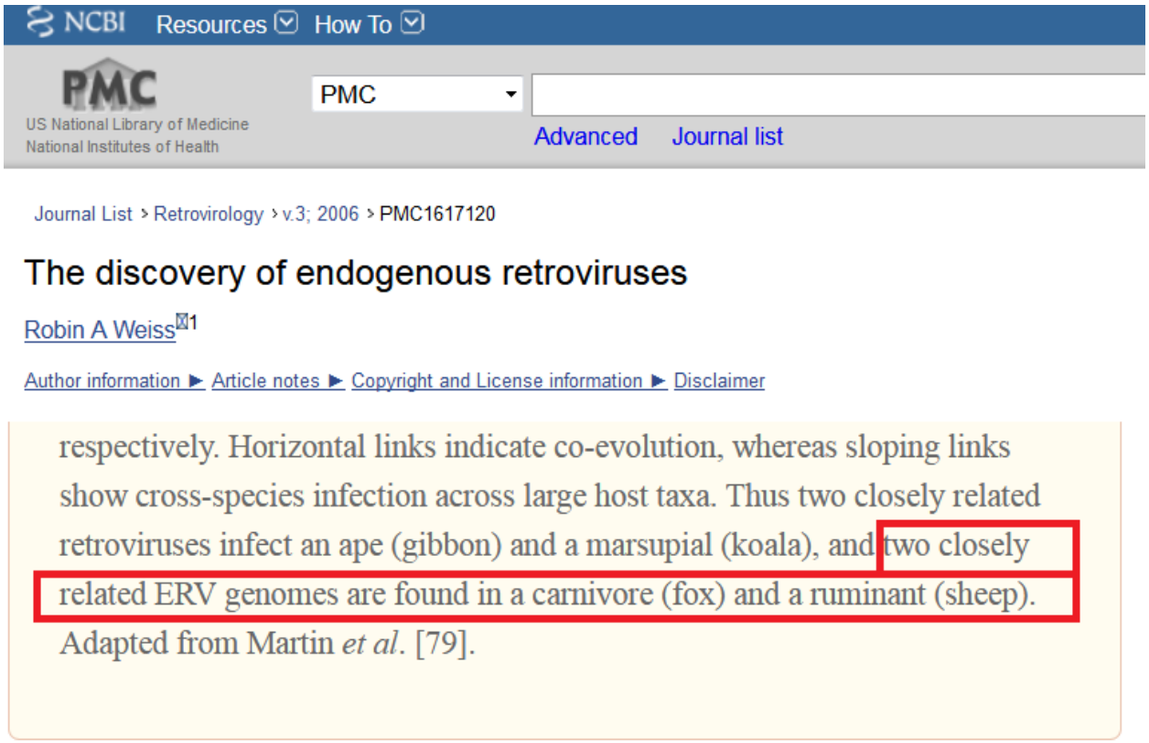
Basically, evolutionists say that common ancestry assumes that there will be shared ERVs and shared ERVs prove evolution to be true because of common ancestry. However, making such a claim is silly because this kind of circular reasoning is unsupported by any outside information. Conversly, there are several characteristics of ERVs that strongly support a creationist worldview. According to the Darwinian hypothesis, ERVs inserted into the genome and remained there and this is why we see shared ERVs in many organisms today that shared a common ancestor millions of years ago. However, it is important to realize that evolution works based on a "use it or lose it" basis. Hence, the fact that any ERVs (which are "leftover, useless" pieces of DNA) exist among primates at all strongly argues against common ancestry by itself. Quite simply, why should so-called junk DNA be conserved for millions (even billions) of years of evolution when it supposedly has no purpose? Without a doubt, if the genome has no purpose for such elements by evolutionists' reasoning, then it should have been eliminated millions of years ago. Besides, if the retrovirus code were a pathological infection, it is known in epidemiology—which is my field of work—that when a cell is infected with a virus, it dies in what is known as apoptosis i.e. the programmed cell death. That is, such a cell is unlikely to remain alive, let alone to have any role in reproduction.

Another problem with the idea that ERVs support common ancestry is the logical fallacy known as the "argument from ignorance." Indisputably, simply finding ERVs in a genome is not sufficient proof common ancestry occurred because there is no way to know beyond a shadow of

a doubt that this proves evolution. Moreover, evolutionists are not willing to imbibe arguments suggesting alternative explanations for why we find ERVs where we do. Ironically, evolutionists say that creationists are holding to a “God of the gaps” to rescue their position, but that simply is not the case because scientists are finding actual functions for a number of ERVs. This therefore declassifies them as junk and demotes the argument that they are evolutionary proof for common ancestry to just wishful thinking. Once again, absence of proof is not proof of absence which leads us to say that “Evolution of the Gaps” is evolutionists’ version of a “God of the gaps.” Evolutionists pigeonhole ERVs as solely proof of common ancestry which is really odd, for I would really like an evolutionist to tell me why the only reason an ERV exists in the genome is to prove common ancestry. This stance leads to myriad problems in doing good science because when they assume the outcomes of experiments before conducting them and fit the data to their own interpretation, they leave the realm of science and enter the realm of self-fulfilling prophecy.

Furthermore, evolutionists argue that there are plagiarized mistakes that are common in different types of organisms, proving common ancestry. However, creationists presented a very strong counter-argument. Basically, in order to have a “plagiarized mistake” two conditions must be met: both sources of information must be the same and there must be an error (or in this case a mutation without a function.) Creationists accept that there are examples of these ‘‘mistakes in common’’, but there are plenty of ones that are not. They explain that when comparing any given stretch of DNA sequence, the best evolutionists can say in favor of common descent is that it appears related. In a word, claiming common ancestry when sequences are identical is a moot point because they could be part of what is considered essential for life as designed by God, and we simply do not know what they do yet. And claiming common ancestry when the sequences are similar is disputable because they are not identical. If there were a common ancestor identified because of ERV similarities, then the ERV mistakes would have to be in exactly the same places consistently through shared common ancestry. However, while there are some similarities, the kinds of the differences and their magnitudes are inconsistently shared through supposed common ancestral lineages. Therefore, an ERV similarity cannot be the basis for determining whether two organisms share common ancestry. Indeed, it is a vicious catch-22 that evolutionists cannot reason their way out of, especially that ERVs are quickly becoming or already were an essential feature of the genome.

But, evolutionsists insist that if apes and humans share ERVs in the same position in their genomes that would seemingly count as evidence for common descent. The solution to this seemingly paradox is embarrassingly simple: closely related ERV sequences are found in different living organisms which, evolutionists believe, have taken completely different evolutionary paths such as carnivores and ruminants: foxes and sheep, baboons and cats…etc.[66] Hence, evolutionsist should either accept that ERV similarities have nothing to do with proving the evolution of one organism from another or they should explain why such similarities exist in organisms that are not evolutionarily related.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Robin A Weiss1
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respectively. Horizontal links indicate co-evolution, whereas sloping links show cross-species infection across large host taxa. Thus two closely related retroviruses infect an ape (gibbon) and a marsupial (koala), and two closely related ERV genomes are found in a carnivore (fox) and a ruminant (sheep). Adapted from Martin et al. [79].

The irony is that scientists have discovered that the pantroglodytes endogenous retrovirus-1 (PTERV1) is found in chimpanzees, gorillas, African monkeys and ancient world monkeys, but not in humans. According to the evolutionary literature, the last common ancestor of humans and chimpanzees split off from the gorilla lineage before the human lineage split off from the chimpanzee lineage. Therefore, if the retrovirus code is found in chimpanzees and gorillas, then it must be present in humans as well. If not then the claim that humans belong to the same family tree as their ‘‘sister species’’ (i.e. gorillas and chimpanzees) is an illusion. Indeed, according to a study published by *Science Daily***,** the retrovirus code of the type PTVER1 is found in gorillas and chimpanzees, but not in humans.

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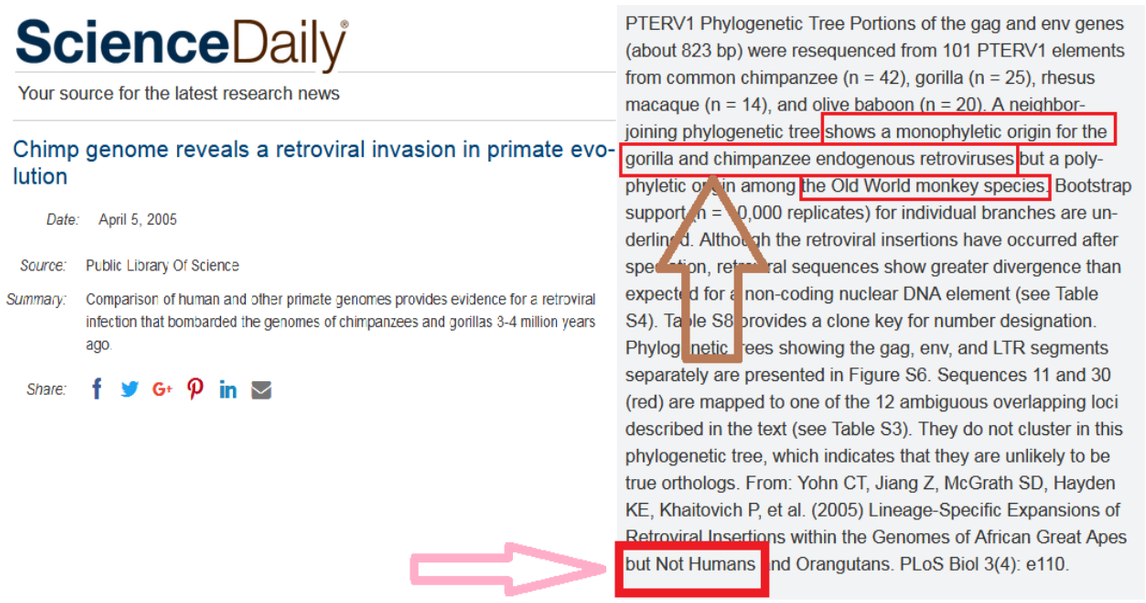
[66]Weiss. R. A, ‘‘The discovery of Endogenous Retroviruses’’, *Retrovirology* 3, 67 (2006), Doi: https://doi.org/10.1186/1742-4690-3-67.

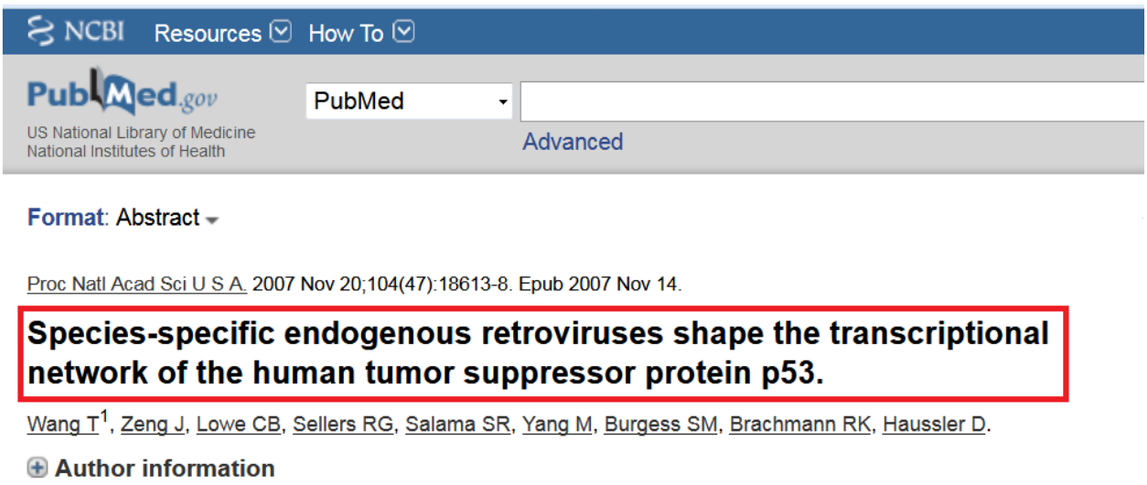

ScienceDaily
Your source for the latest research news
Chimp genome reveals a retroviral invasion in primate evolution
Date: April 5, 2005
Source: Public Library Of Science
Summary: Comparison of human and other primate genomes provides evidence for a retroviral infection that bombarded the genomes of chimpanzees and gorillas 3-4 million years ago.
Share:
PTERV1 Phylogenetic Tree Portions of the gag and env genes (about 823 bp) were resequenced from 101 PTERV1 elements from common chimpanzee (n = 42), gorilla (n = 25), rhesus macaque (n = 14), and olive baboon (n = 20). A neighbor-joining phylogenetic tree shows a monophyletic origin for the gorilla and chimpanzee endogenous retroviruses but a polyphyletic origin among the Old World monkey species. Bootstrap support (n = 10,000 replicates) for individual branches are underlined. Although the retroviral insertions have occurred after speciation, retroviral sequences show greater divergence than expected for a non-coding nuclear DNA element (see Table S4). Table S8 provides a clone key for number designation. Phylogenetic trees showing the gag, env, and LTR segments separately are presented in Figure S6. Sequences 11 and 30 (red) are mapped to one of the 12 ambiguous overlapping loci described in the text (see Table S3). They do not cluster in this phylogenetic tree, which indicates that they are unlikely to be true orthologs. From: Yohn CT, Jiang Z, McGrath SD, Hayden KE, Khaitovich P, et al. (2005) Lineage-Specific Expansions of Retroviral Insertions within the Genomes of African Great Apes but Not Humans and Orangutans. PLoS Biol 3(4): e110.

Hence, the claim that ERVs exist in similar places in different genomes with the exact same sequence as a result of common ancestry did not prove evolution but undermined its validity.

Moreover, this idea of an ERV similarity is limited because it ignores the fact that ERVs could exist in similar places in different genomes with the exact same sequence in order to perform an essential function. Critics of intelligent design have frequently called ERVs “junk DNA,” that is mere evolutionary waste or flotsam. In response to this claim, creationists suggest that, when analyzing common descent, the number of ERVs shared by humans and chimps is not a very important question. Rather, the relevant question is: what if ERVs are not junk? What if they are a type of functional DNA? If that is the case, then shared ERVs could easily be explained by common design rather than common descent, and they would certainly no longer be some kind of special argument for common ancestry. Interestingly, the number of ERVs coding for important proteins continues to grow and the concept that they have no function is disappearing with each genome sequenced. In other words, there is good evidence that ERVs as a class of DNA perform critical cellular functions in that they help regulate genes and even determine cell types. For instance, scientists have discovered that thousands of ERV-derived sequences were activated in a cell type-specific manner, especially in embryonic and cancer cells, and demonstrated that this activity was associated with cell type-specific expression of neighboring genes. Taken together, these results demonstrate that TEs, and in particular ERVs, have contributed hundreds of thousands of novel regulatory elements to the primate lineage and reshaped the human transcriptional landscape.

Interestingly, genetic studies report that ERVs actively shape the p53 transcriptional network. The p53 gene is a gene that makes a protein that is found inside the

nucleus of cells and plays a key role in controlling cell division and cell death. It is a type of tumor suppressor gene also called tumor protein p53 gene (TP53). The tumor suppressor protein p53 is a sequence-specific transcription factor that responds to cellular stresses by coordinating expression of genes involved in cell-cycle arrest, senescence, and apoptosis. Actually, p53 regulates genes of diverse biological pathways and is considered a pleiotropic master regulator. Interestingly, statistics show that about half of all cancers are directly caused by the gene P53 mutations. These mutations result in a p53 protein that is less able to control cell proliferation. Specifically, it is unable to trigger apoptosis in cells with mutated or damaged DNA. As a result, DNA damage can accumulate in cells. Such cells may continue to divide in an uncontrolled way, leading to tumor growth.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Proc Natl Acad Sci U S A. 2007 Nov 20;104(47):18613-8. Epub 2007 Nov 14.
Species-specific endogenous retroviruses shape the transcriptional network of the human tumor suppressor protein p53.
Wang T[1], Zeng J, Lowe CB, Sellers RG, Salama SR, Yang M, Burgess SM, Brachmann RK, Haussler D.
Author information

Most importantly, research has shown that ERVs are being transcribed in a highly non-random manner that correlates with embryological patterns in association with other functional genetic elements. This decidedly points towards functionality. Junk-DNA defenders rarely address such evidence showing that transcription is not random because their ‘‘guilty-until-proven-innocent argument’’ assumes that ERVs are by default non-functional**.** They ignore the specific empirical evidence which shows that ERVs are not merely transcribed, but they are transcribed in a non-random, enriched, cell type-specific manner that correlates with the transcription of other functional genetic elements. Without a doubt, this is the opposite of random or stochastic transcription and it strongly suggests function. In a nutshell, ERVs are functional. Therefore, even if they are “shared” and fit into a nested hierarchy, they need not necessarily indicate common descent but could just as easily reflect functional constraints and common design.

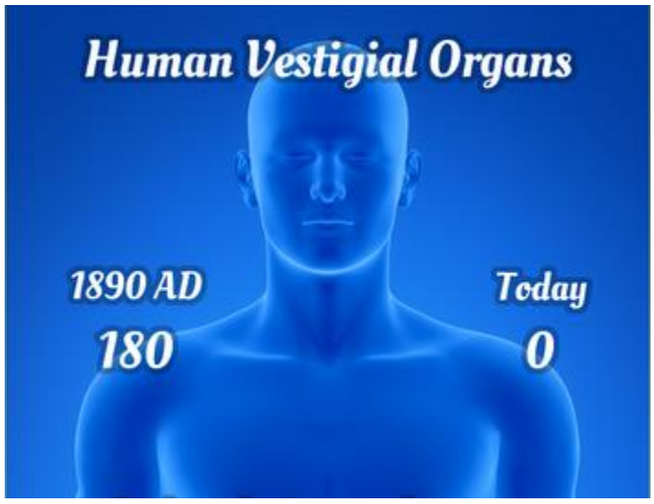
To conclude, it is worth mentioning that the previous three ‘‘claims’’ (i.e. human chromosome 2 is a result of an end-to-end fusion of two ancestral chromosomes, the recurrent

laryngeal nerve refutes intelligent design and is an evolutionary proof that Man evolved from fish, endogenous retroviruses (ERVs) support common ancestry) are the most famous ‘‘arguments’’ that evolutionists have ever presented in favor of their theory. Hence, after refuting them we reach the conclusion that this theory is merely a metaphysical assumption and each finding of modern science is a nail in the evolutionary coffin and a source of embarrassment for its advocates wherefore they decline to discuss them. In sum, belief in the theory of evolution is easy because it is the only obvious justification for materialism, yet belief is one thing, and proving the validity of belief is another.

36. Is the argument for vestigial organs valid?

Vestigial organs have long been one of the classic arguments used as evidence for evolution. The argument goes like this: living organisms, including man, contain organs that were once functional in our evolutionary past, but that are now useless or have reduced function. These vestigial organs are considered by evolutionists to be compelling evidence for evolution and against creation because they reason a perfect Creator would not make useless organs. Thus, for over 100 years, evolutionists have continued to use vestigial organs as evidence for evolution. There had a list of no less than 180 vestigial structures in the human body, which they believe are sufficient to make a man a ‘‘veritable walking museum of antiquities.’’ They claim that the human body has something akin to its own junk drawer which is full of vestigial organs, or souvenirs of our evolutionary past.

However, over the years, advancement in understanding of biological science has raised serious doubts about vestigial organs as evidence for evolution. In fact, creationists have subjected the evolutionary interpretation of vestigial organs to strong criticism. Consequently, all of the so-called vestigial organs have been subsequently shown to have useful functions and indeed some have functions essential for life. In other words, the history of science documents a steady reduction in the number of the so-called vestigial organs in that the allegedly non-functional organs, one by one, turned out to be organs whose functions had not yet been discovered. Hence, as science progressed, it was discovered that all of the organs in evolutionists’ list in fact had very important functions**.**



For example, evolutionists put the parathyroid gland in their list of so-called ‘useless’ organs.[67] Parathyroid glands are four small glands of the endocrine system which continuously monitor and regulate the calcium levels in our blood, in our bones, and throughout our body. They regulate the calcium by producing a hormone called Parathyroid Hormone (PTH). Actually, calcium is the most important element in our bodies because we use it to control many organ systems. Therefore, it is regulated more carefully than any other element. In fact, calcium is the only element with its own regulatory system i.e. the parathyroid glands. Indeed, the only purpose of the parathyroid glands is to regulate the calcium level in our bodies within a very narrow range so that the nervous and muscular systems can function properly. Basically, they measure the amount of calcium in the blood every minute of every day and if the calcium levels go down a little bit, the parathyroid glands recognize it and make parathyroid hormone (PTH) which goes to the bones and takes some calcium out (i.e. it makes a withdrawal from the calcium vault) and puts it into the blood. And when the calcium in the blood is high enough, then the parathyroids shut down and stop making PTH. Without a doubt, removing parathyroid glands will cause very bad symptoms of too little calcium (hypoparathyroidism).

[67]R. Wiedersheim, *The Structure of Man: An Index to His Past History*, (London: Macmilan & Co, 1895.)

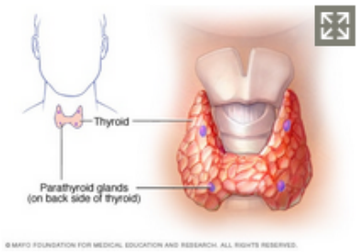
Hypoparathyroidism

Symptoms & causes | Diagnosis & treatment | Doctors & departments

Overview

Print

Hypoparathyroidism is an uncommon condition in which your body secretes abnormally low levels of parathyroid hormone (PTH). PTH is key to regulating and maintaining a balance of your body's levels of two minerals — calcium and phosphorus.

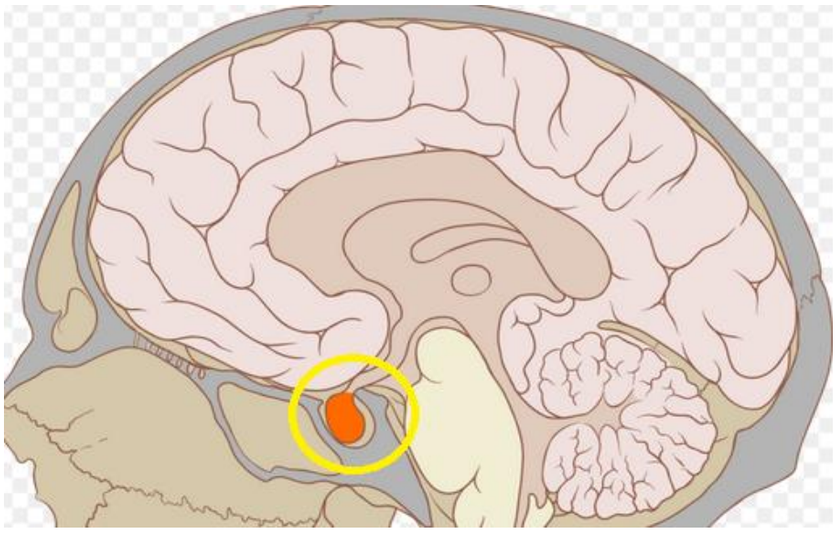


Parathyroid glands

The low production of PTH in hypoparathyroidism leads to abnormally low calcium levels in your blood and bones and to an increase of phosphorus in your blood.

Supplements to normalize your calcium and phosphorus levels treat the condition. Depending on the cause of your hypoparathyroidism, you'll likely need to take supplements for life.

Moreover, the pituitary gland was another alleged example of vestigial organs. It is a small pea-sized gland that plays a major role in regulating vital body functions and general well-being. The pituitary gland is called the ‘master gland’ because it controls the activity of most other hormone-secreting glands, and the hormones it produces control so many different processes in the body. In fact, it senses the body’s needs and sends signals to different organs and glands throughout the body to regulate their function and maintain an appropriate environment and it secretes a variety of hormones into the bloodstream which act as messengers to transmit information from the pituitary gland to distant cells, regulating their activity. For example, the pituitary gland produces prolactin, which acts on the breasts to induce milk production. It also secretes hormones that act on the adrenal glands, thyroid gland, ovaries and testes, which in turn produce other hormones. Basically, the pituitary gland controls metabolism, growth, sexual maturation, reproduction, blood pressure and many other vital physical functions and processes hrough secretion of its hormones.



The pituitary gland makes growth hormone, which stimulates the growth of bone and other tissues and regulates growth, metabolism and body composition. A deficiency of growth hormone secretion before puberty (by the end of which the synthesis of new bone tissue is complete) results in pituitary dwarfism, whereas an excess of growth hormone in children results in gigantism.

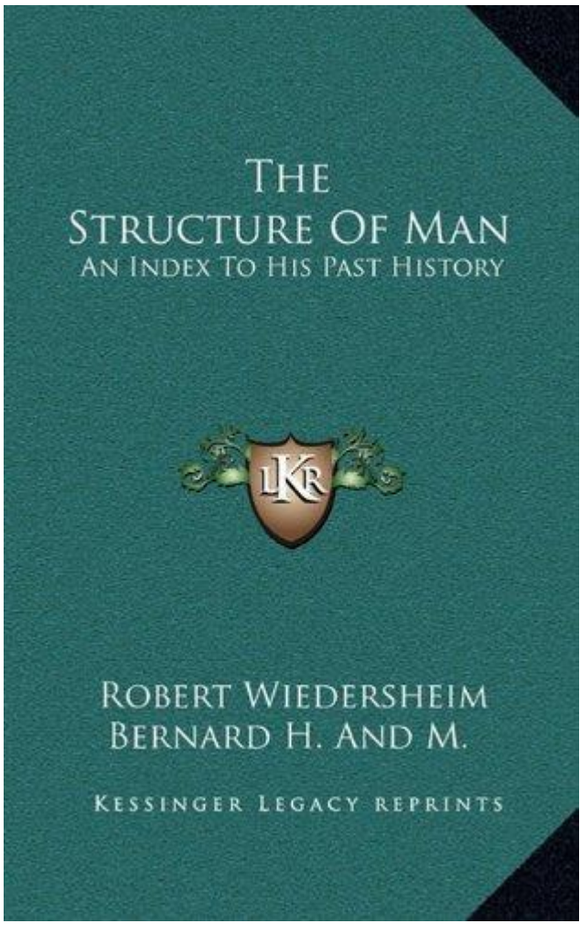
Dwarfism and Gigantism

In fact, if the GH level increases or decreases by an insignificant percentage–say 1/100000000 gram, complete changes occur in the structure of the skeleton.

Furthermore, evolutionists considered the lacrimal gland a vestige of evolution because they did not know the importance of tears for the human eye.[68] The main function of the lacrimal gland (tear gland) is the production of lacrimal fluid (tear fluid). In other words, the lacrimal gland secretes lacrimal fluid which forms the aqueous portion of a multilayered tear film. The

[68] R. Wiedersheim, *The Structure of Man: An Index to His Past History*, (London: Macmilan & Co, 1895.)

trilaminar tear film performs several important functions including: protecting the ocular surface from pathogens, removing debris and metabolic waste, creating an air-tissue interface for gaseous exchange in order to provide oxygen to the avascular cornea, providing an even optical surface for light transmission at the air-cornea interface and promoting the integrity of the transparent cornea by providing nutrients and metabolites. Without a doubt, the book entitled *The Structure of Man: An Index to his Past History*, which describes these miraculous glands as vestigial organs, is a shameful legacy of the evolution theory literature.



Essentially speaking, the question which highlights the major flaw in the vestigial organ argument is: why would useless organs continue to exist for millions of years after they ceased to have any selective advantage? Moreover, the problem for using vestigial organs as evidence for evolution is that the chief burden of the macro evolutionary explanation is to account for the spontaneous origin of new functional organs—not the loss of functional organs. In other words, while evolution might require the loss of functional organs, it is the acquisition of fundamentally new organs that remains unexplained by random mutations and natural selection.

Additionally, the problem with declaring any organ to be without function is discriminating between truly functionless organs and those that have functions that are simply unknown. As we have explained, over the years nearly all of the organs once thought to be

useless have been found to be functional. Hence, creationists assert that when scientists have no evidence for the function of an organ, it is well to bear in mind that absence of evidence is not evidence of absence.

Furthermore, as the list of “functionless” organs has grown smaller and smaller with advancing knowledge, evolutionists’ definition of vestigial organs has been modified to include those whose functions are claimed to have “changed” to serve different functions. Thus, the evolutionists might concede that a so-called vestigial organ does indeed serve an important function, but would claim, without evidence, that it was once used by ‘‘our ancestors’’ for a different function. According to Darwin skeptics, evolutionists insist on explaining vestigial organs only in terms of evolution whislt other explanations are more plausible and even provable. They argue that the human body, for example, does have many organs and structures that are clearly vestiges of our embryological development. In fact, it is quite easy to prove that an organ or structure is a vestige of embryology, whereas there can be no empirical evidence to support the speculation that an organ is a vestige of evolution. Quite simply, there are several structures that function during the development of the embryo and fetus that appear to be no longer used after birth, and remnants of these once-functional structures persist throughout life. Indeed, such structures perfectly fit the definition of a vestige, but they are not vestiges of evolution. Also, many vestigial organs are examples of homology but not necessarily of evolution. For instance, all terrestrial vertebrates, share a widespread similarity (homology) of body parts. Unlike evolutionists, who insist that this similarity is the result of evolution from a common ancestor, creationists argue that this similarity reflects the theme of a common Creator and the need to meet similar biological requirements.

Most importantly, once an organ is considered to be useless, it may be ignored by most scientists, or even worse, surgically removed by physicians as a useless evolutionary leftover. Imagine, if you fell into the hands of a surgeon who believed in the theory of evolution a century ago? How many of your organs would have been surgically removed since they are claimed to be useless vestiges? But did the myth stop after a century? Unfortunately, the vestigial organs, though a long discredited myth, continue to be used as evidence for evolution. This leads us to say that although scientists generally claim that their research reveals ‘the truth’, or the underlying causal laws of nature and the universe, the process of conducting scientific research and constructing scientific knowledge is not entirely value-free and non-ideological. In point of truth, the research process itself may simply reflect the biases of influential scientists in addition

to the fact that the wider field of scientific research is influenced by those who fund the research. Oddly enough, there are still a number, albeit a small number, of organs that evolutionists promote as vestiges of evolution.

Ever since Darwin, the appendix has been the prime example of a "useless" organ and it is frequently cited as a vestigial organ supposedly proving something about evolution, which is definitely not the case. Actually, unlike what one would expect from a vestigial organ, the appendix is a complex, highly specialized organ with a rich blood supply. It is part of the gut associated lymphoid tissue, and plays an immunological role much like that of the tonsils and adenoids (also once considered to be vestigial). Recent evidence suggests that the appendix is well suited to serve as a "safe house" for commensal (mutually beneficial) bacteria in the large intestine. Specifically, the appendix is believed to provide support for beneficial bacterial growth by facilitating re-inoculation of the colon with essential bacteria in the event that the contents of the intestinal tract are purged following exposure to a pathogen.

Again, evolution is inconsistent with science and the irony is that even what students learn in academic textbooks on Medicine is completely contrary to what is promoted by evolutionists. For instance, I was coincidently reading *Basics of General Surgery* which medical students use at Ain Shams University, and my eyes fell on this sentence: ''appendix is the tonsil of GIT.''[69] Indeed, the human appendix is not a rudimentary part of the intestine, but has immunological importance for the development and preservation of the intestinal immune system. After assessing several experiments and observations, the scientists believe that the good bacteria in the appendix that help our digestion can survive a bout of diarrhea that cleans out our gut, and appear to repopulate the gut. According to *Science Daily*, the immune cells make appendix the silent hero of the digestive health, which is the reason why those who undergo an appendectomy are more prone to diarrhea.

[69]Mohammed El-Matary, *Basics of General Surgery*, (Cairo: Matary Surgery, 2012), p. 187.

ScienceDaily

Your source for the latest research news

Science News *from research organizations*

Immune cells make appendix 'silent hero' of digestive health

Date: November 30, 2015

Source: Walter and Eliza Hall Institute

Summary: Innate lymphoid cells (ILCs) are crucial for protecting against bacterial infection in people with compromised immune systems, report investigators. Their work shows that a network of immune cells helps the appendix to play a pivotal role in maintaining health of the digestive system, supporting the theory that the appendix isn't redundant.

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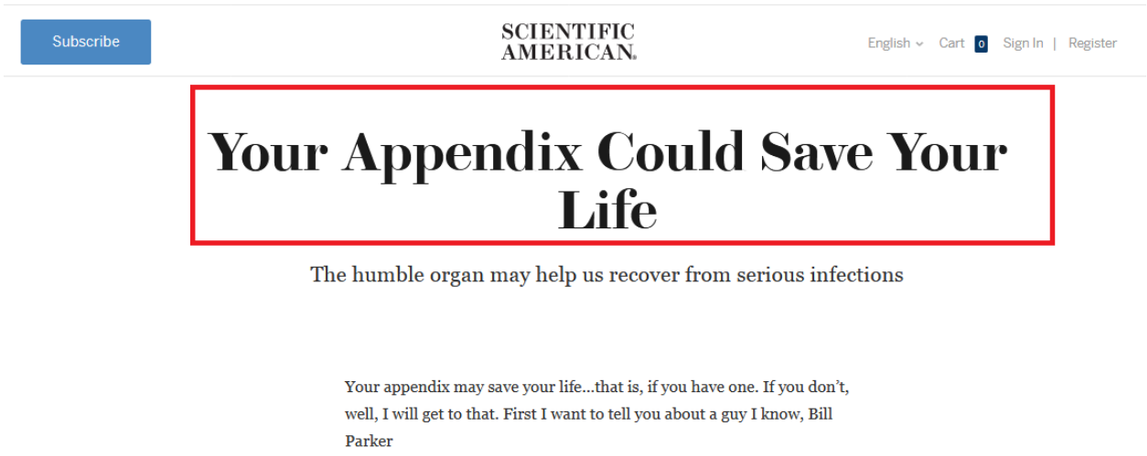
Correspondingly, *Scientific American* published an article entitled: ‘‘Your Appendix Could Save Your Life’’.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Your Appendix Could Save Your Life
The humble organ may help us recover from serious infections
Your appendix may save your life...that is, if you have one. If you don't, well, I will get to that. First I want to tell you about a guy I know, Bill Parker

37. Are wisdom teeth a vestige of evolution?

Wisdom teeth, properly known as third molars, generally appear between the ages of 15 and 27 in both the upper and lower jaws of man. Many evolutionists consider them to be vestigial because unlike apes, third molars often fail to develop properly in man due to lack of space in the jaw. They argue that apes with their sloping face have longer jaws than man, and that when ape-like creatures evolved into humans with a vertical face and shorter jaws, there was no longer room for third molars. However, third molars are hardly useless vestiges because when there is adequate room for their development, they are fully functional molars and are used in chewing much as the first and second molars. Essentially speaking, wisdom teeth are vitally important in diets involving foods that require more chewing and more jaw pressure since they

are necessary to further aid in grinding food.[70] Obviously, humans need wisdom teeth less as a result of relying on consuming food in a much different manner, one in which much less tearing, chewing and crushing is necessary, especially with junk food. However, for those who eat a balanced and healthy diet rich in meat, legumes, nuts, vegetables…etc the wisdom teeth are considered a natural need.[71] Think about the process of shedding primary teeth and their replacement by permanent teeth. Indeed, it is a sign of perfect divine creation. Also, wisdom teeth appear at a later stage, after the emergence of the permanent teeth, to bring the teeth together and close the spaces between the molars. Undoubtedly, the infinite wisdom of the Creator makes us know that everything has a function.

38. Is the coccyx a remnant of our ancestors past?

The so-called "tailbone" is perhaps the most commonly touted example in man of a "useless" evolutionary vestige. According to evolutionary dogma, the tailbone, properly called the coccyx is a vestigial tail left over from our tailed monkey-like ancestors. The human coccyx is a group of four or five small vertebrae fused into one bone at the lower end of our vertebral column. It is commonly called the "tailbone" because of its superficial similarity to a tail. The coccyx does occupy the same relative position at the end of our vertebral column as does the tail in tailed primates, but then, where else would it be? The vertebral column is a linear row of bones that supports the head at one end and the other must end somewhere. Indeed, as Darwin skeptics say, wherever it ends, evolutionists will be sure to call it a vestigial tail.

Many modern biology textbooks give the erroneous impression that the human coccyx has no real function other than to remind us of our evolutionary ancestry. However, the coccyx has some very important functions. Actually, six muscles converge from the ring-like bones of the pelvic brim to anchor on the coccyx, forming a bowl-shaped muscular floor of the pelvis called the pelvic diaphragm. The incurved coccyx with its attached pelvic diaphragm supports the organs in our abdominal and pelvic cavities such as the urinary bladder, uterus, prostate, rectum, and anus. Thus, without this critical muscular support, these organs could be easily

[70]Nasrat Hassan, *Al-ḥaqiqa wa Al-khayāl fi Nadhariyyat At-tatawur*, (Djeddah: Dar Al-Madani, 2018).

[71]Price, A. Weston, ''Nutrition and Physical Degeneration: A Comparison of Primitive and Modern Diets and their Effects.'' as cited in Al-Bāḥithun Al-muslimun.

herniated. Also, the urethra, vagina, and anal canal pass through the muscular pelvic diaphragm, and thus the diaphragm serves as a sphincter for these structures.

It is absurd that even human abnormalities that have nothing to do with the coccyx have been declared to be "human tails." In a report in *The New England Journal of Medicine*, titled "Evolution and the Human Tail," Ledley described a two-inch long fleshy growth on the back of a baby, which he claimed to be a "human tail," though he conceded that it showed none of the distinctive biological characteristics of a tail! In fact, the "tail" was merely a fatty outgrowth of skin that was not even located in the right place on the back to be a tail! Polyps are abnormal tissue growths that most often look like small (less than half an inch wide), flat bumps or tiny mushroomlike stalks. Though polyps in the colon are the most common, it is also possible to develop polyps in places that include: ear canal. Besides, there is a fundamental difference, anatomically speaking, between a polyp and a tail. Quite simply, vertebrae tails, unlike polyps, contain caudal vertebrae or cartilages. According to *The New England Journal of Medecine*, ''there is no zoological precedent for a vertebrae tail without caudal vertebrae.''[72] Moreover, *The Journal of Neurosurgery*, one of the most influential medical journals, states that: ''even such so-called ''tails'' are not anything like those found in tailed mammals. That is for the simple reason that "true tails" in humans entirely lack vertebrae—or any kind of bone, cartilage, notochord or spinal cord.''[73]

39. Is it true that the bulk of the material in the human genome (up to 95 percent) is "junk DNA''?

Indisputably, the argument of junk DNA simply perpetuates the problems with the vestigial organs argument, but at the molecular level. Evolutionists argue that the prevalence of "dead genes" is an even better example of bad design. Indeed, molecular biologists discovered that a large fraction of the DNA is never translated into protein. Hence, evolutionists called this "junk." They argue that if the 'purpose' of DNA is to supervise the building of bodies, it is

[72] Ledley Fred, ''Evolution and the Human Tail'', *The New England Journal of Medecine*, 306 (20) 1212-1215 (May 20, 1982).

[73]Spiegelmann Roberto, Schinder Edgardo, Mintz Mordejai and Blackstein Alexander, ''The Human Tail: A benign Stigma'', *Journal of Neurosurgery*, 63: 461-462 (1985) as cited in in The Al-Bāḥithun Al-muslimun.

surprising to find a large quantity of DNA which does no such thing. They further state that from the point of view of Darwinian evolution there is no paradox because, as they put it, the true 'purpose' of DNA is to survive, no more and no less. Therefore, they regard much of our DNA as parasitic. According to them, the genes that make a trait, which is no longer used or which becomes reduced, do not instantly disappear from the genome because evolution stops their action by inactivating them and does not snip them out of the DNA. Accordingly, they predicted that there should be vestigial genes. In other words, they expected to find silenced or 'dead' genes (i.e. genes that once were useful but are no longer intact or expressed) in the genomes of many species. Indeed, evolutionists were excited by this prediction because the idea that all species were created from scratch predicts that no such genes would exist. As it happens, this prediction was tested because scientists could read the DNA code and the evolutionary prediction about pseudogenes has been fulfilled. Hence, evolutionists declared that the human genome and that of other species are truly, to borrow their words, well populated graveyards of dead genes or pseudogenes.

But, evolutionists are dead wrong because evidence pouring in from genome-sequencing projects shows that virtually all of an organism's DNA is transcribed into RNA, and that even though most of that RNA is not translated into proteins, it performs essential regulatory functions. In fact, science journals publish articles describing more such functions every month. It is worth mentioning that this is not late-breaking news because the evidence has been accumulating since 2003 (when scientists finished sequencing the human genome) that "pseudogenes" and other so-called "junk DNA" sequences are not useless after all. Actually, this "junk" is far from being an evolutionary byproduct because it contains the vital instructions that switch genes on and off in all kinds of different cells. In fact, changes in these instructions can affect everything from color vision to whether a person develops diabetes or cardiovascular disease or a host of other conditions. Evolution critics argue that the junk DNA concept is bizarre and they set forth the following analogy: if you picked up a Chinese newspaper and you could read only one or two percent of the characters, would you automatically assume the rest was junk? In fact, the Human Genome Project sequenced the 3 billion letters or DNA bases that make up the genome, and it provided a basic catalog of genes, which occupy only about 2 percent of the genome. But understanding how genes turn on and off is vital to figuring out basic biological processes, like development, or how genes contribute to normal health and disease. Creationists explain that there are a modest number of genes (around 20,000) but these genes are controlled

by millions of DNA "switches," with the whole unit functioning as a kind of operating system for the cell.

Quite simply, research shows that the so-called junk DNA is the maestero of the genome, the director of its work, and the regulator of the most complex biological processes in it. Computational biologists published an article in *Scientific American* wherein they asserted that junk DNA holds hidden treasures.

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Hidden Treasures in Junk DNA

What was once known as junk DNA turns out to hold hidden treasures, says computational biologist Ewan Birney

By Stephen S. Hall on October 1, 2012

In the 1970s, when biologists first glimpsed the landscape of human genes, they saw that the small pieces of DNA that coded for proteins (known as exons) seemed to float like bits of wood in a sea of genetic gibberish. What on earth were those billions of other letters of DNA there for? No less a molecular luminary than Francis Crick, co-discoverer of DNA's double-helical structure, suspected it was "little better than junk."

The phrase "junk DNA" has haunted human genetics ever since. In 2000, when scientists of the Human Genome Project presented the first rough draft of the sequence of bases, or code letters, in human DNA, the initial results appeared to confirm that the vast majority of the sequence —perhaps 97 percent of its 3.2 billion bases—had no apparent function. The "Book of Life," in other words, looked like a heavily padded text.

Now, in a series of papers published in September in Nature (Scientific American is part of Nature Publishing Group) and elsewhere, the ENCODE group has produced a stunning inventory of previously hidden switches, signals and sign posts embedded like runes throughout the entire length of human DNA. In the process, the ENCODE project is reinventing the vocabulary with which biologists study, discuss and

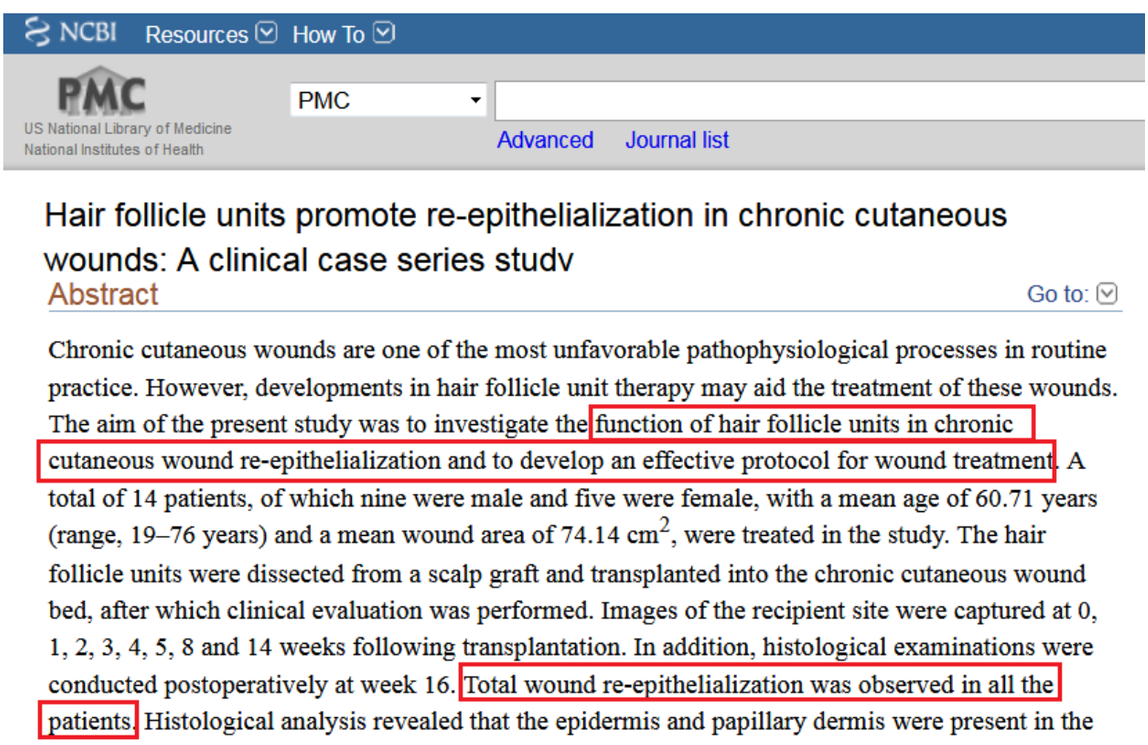
Nonetheless, evolutionists ignore this enormous body of evidence, which decisively refutes the Darwinian prediction that our genome should contain lots of "dead" DNA. Interestingly, a new science called epigenetics has been established to study the functions and properties of what was once believed to be junk DNA. Epigenetics literally means ''above'' or ''on top of'' genetics. It refers to external modifications to DNA that turn genes ''on'' or ''off.'' These modifications do not change the DNA sequence, but instead, they affect how cells ''read'' genes.

40. Is human hair a vestige of evolution?

Evolutionists have long insisted that human body hair, and the small muscles attached to these hairs are useless vestiges from our hairy ancestors. But human hair is as fully functional as that of any other mammal. The body of man, like that of most mammals, is covered with hairs except for the palms and soles. But man, unlike other mammals, has mostly tiny colorless hairs covering the seemingly "unhaired" parts of his body which gives humans the appearance of being "hairless" with the exception of such areas as the scalp, axilla, chest, and genital regions.

But in fact, hair density per square inch is approximately the same on the human body as it is for most primates. Evolutionists argue that human body hairs are vestigial (useless) because there are so few long terminal hairs compared to tiny vellus hairs.

However, an important function of hair, in addition to its aesthetic value, is its sensory function. Actually, all hair follicles, regardless of size, are supplied with sensory nerves so that they may be considered to be mechanoreceptors. Our hairs are like small levers that, when moved by any physical stimulus including air, send sensory signals to our brain. This is true of both the tiny vellus hairs and the long terminal hairs. This sensory function of hair can hardly be considered vestigial. Another important function of hair follicles is the restoring of the epidermal skin surface following cuts and deep abrasions. In other words, human hair follicles, regardless of size, serve as an important source of epidermal cells for recovering the skin's surface (reepithelialization) when broad areas of the epidermis are lost. Indeed, if it were not for man's abundant hair follicles and sweat ducts, even routine skin abrasions might require a skin transplant.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Hair follicle units promote re-epithelialization in chronic cutaneous wounds: A clinical case series studv

Abstract

Go to:

Chronic cutaneous wounds are one of the most unfavorable pathophysiological processes in routine practice. However, developments in hair follicle unit therapy may aid the treatment of these wounds. The aim of the present study was to investigate the function of hair follicle units in chronic cutaneous wound re-epithelialization and to develop an effective protocol for wound treatment. A total of 14 patients, of which nine were male and five were female, with a mean age of 60.71 years (range, 19–76 years) and a mean wound area of 74.14 cm^2, were treated in the study. The hair follicle units were dissected from a scalp graft and transplanted into the chronic cutaneous wound bed, after which clinical evaluation was performed. Images of the recipient site were captured at 0, 1, 2, 3, 4, 5, 8 and 14 weeks following transplantation. In addition, histological examinations were conducted postoperatively at week 16. Total wound re-epithelialization was observed in all the patients. Histological analysis revealed that the epidermis and papillary dermis were present in the

41. Are goosebumps vestigial?

We know for a fact that all hairs are associated with muscles, and most have a muscle called the erector pili, which serves to move the hair from its normal inclined position to a more erect position. In the case of the vellus hairs of man this produces what is commonly called "goose bumps." Goosebumps are very small elevations in the skin that occur around the hair follicle. They are mainly related to emotional reactions. God says: Allah has sent down the best

statement: a consistent Book wherein is reiteration. The skins shiver therefrom of those who fear their Lord; then their skins and their hearts relax at the remembrance [i.e. mention] of Allah. (The Qur'an 39:3) In other words, strong emotions can cause adrenalin to be released, which is why we get goosebumps in response to music we love, or a strong memory. Actually, erector pili muscles are supplied with nerves of the sympathetic nervous system, which is often associated with our response to “flight and fright” stimuli. Thus, when we are frightened we may get goose bumps. We also get goose bumps when we are chilled in that contraction of the erector pili muscles produces heat, and if this response is inadequate to warm the body, shivering which involves repeated contractions of the large body muscles may follow. Evolutionists ask: why do humans still have two million hair follicles if since the advent of clothing they no longer need hair for warmth, nor do they need to blow up into a puffy hair ball to scare off enemies (like mammals)?

It has been long assumed by evolutionists that for ‘naked apes’ (humans), goosebumps are an evolutionary remnant from the ape-days of fright or flight and a way to keep warm when the cold creeps in (i.e. they are an example of a vestigial human reaction to stress). Conversly, goose bumps are not remnants of an evolutionary past, but serve several functions for humans. Indeed, new research is uncovering the incredible potential of the ‘goosebump muscle’. Scientists now know that these little bumps are much more than an evolutionary hangover and they can give us more than the shivers. First of all, the erector pili muscles are in a position to help squeeze oil from the sebaceous glands which are also attached to the hair follicle. Sebaceous glands release sebum into the follicular duct and thence to the surface of the skin. It is noteworthy that sebum lubricates the skin to protect it against friction and make it more impervious to moisture.

In fact, research, involving doing 3D constructions of the goosebump muscles, has shown that they are a lot more interesting than people used to think, that is to say they are far from being an evolutionary remnant of no functional significance. Surprisingly, scientists discovered that they hold the key to unlocking new treatments for burns victims, halting the spread of skin cancer, and even curing baldness. In fact, an important function of the goosebump muscles which has to do with maintaining vital stem cells of the skin has been discovered. According to the findings, hair follicles have the unique ability to completely regenerate. Quite simply, when a hair is plucked, up to 70 per cent of the follicle is destroyed, but when the hair regrows, the follicle regenerates itself. Interestingly, the lower end of the goosebump muscle is

attached to the follicle, so it creates a ‘stem cell niche’, that is a place that protects and maintains stem cell populations. Also, the upper end of the goosebump muscle creates a second stem cell niche, which is even more important in that it maintains the stem cell population for the entire outer layer of the skin. Thus, the muscle is like a dumbbell connecting the two vital stem cell niches. For example, when we graze our knees, a signal is transmitted to the damaged hair follicle that there is a deficiency in the surface skin cells wherein the hair follicle stem cell is activated and skin cells are produced that are then sent up to the surface to heal the graze. In fact, until this research was done, no-one knew where the stem cells were in the epidermis. As it turns out, the stem cell populations are very important in wound healing and skin cancer. Scientists argue that knowing where the stem cells are is really important because if they are going to develop a new treatment for skin cancer, it has to be directed to where the mutations in the skin cells are leading to cancer.

Furthermore, the goosebump muscles play another role in the maintenance of the epidermis (i.e. epidermal homeostasis). We know that every time we rub our skin, dead skin cells are shed off the surface, meanwhile new skin is dividing in the skin cells. As scientists explain, one of the problems in trying to grow new skin for burn victims is that they have a depleted skin population and the skin is not functioning properly. Hence, this discovery of the stem cell population and its relationship to our goosebump muscles is extremely important to both stop cancer cells from dividing and accelerate healing in burns victims. More importantly, the goosebump muscle could also impact baldness which is of interest to millions worldwide. Researchers discovered recently that part of the problem, when someone goes bald, is because the attachment of the goosebump muscle to the hair follicle is destroyed and replaced by fat. Actually, bald people cannot get goosebumps on the scalp and they cannot regrow hairs either because the follicles cannot regenerate. Therefore, finding a solution to why the goosebump muscle is destroyed may provide more advances in treating a problem that affects many millions worldwide.

42. Is the little semi-lunar membrane at the corner of the eye a vestige of evolution?

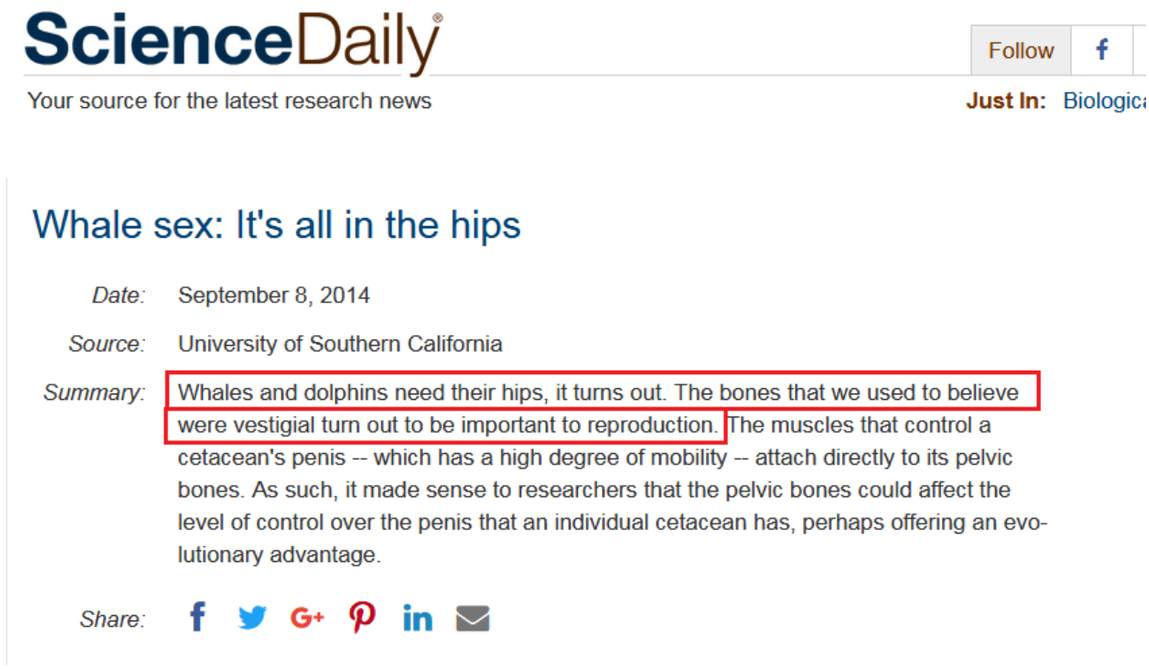
The plica semilunaris is a little fold of tissue at the inner corner of the eye. Some evolutionists claim that it is a remnant of the third eyelid of a lower form, such as the third eyelid

in birds and reptiles. But in man this tissue has several essential functions. In fact, if you did not have the tissue for support at that location, the eyeball would sink and this would cause double vision. Actually, the tissue not only supports the eyeball, but the tear duct as well. That is, without this tissue, tears would drain over the cheeks causing a cosmetic problem. This area also serves to collect foreign matter. For example, when you wake up in the morning, you will often find some white material in the inner corner of your eye. It collects in this fold, the semi-lunar fold of the eye. All in all, it is not true that this fold has no purpose. Surely, it was designed and it does not represent the cleverly designed third eyelid of the bird which prevents the bird's eyes from drying out during flight.

43. Are whale pelvic bones vestegial?

Whales have especially small pelvic bones compared to their body size.

For a long time evolutionist scientists figured that the bones are so small because they are a shrunken evolutionary remnant from an ancestor that once walked on land. They regarded them as useless vestiges that served no real purpose. Contrary to popular belief, these bones are not vestigial structures because they do have a function. Scientists have discovered that the tiny bones may actually play a huge role in whale reproduction. A new study suggests that the bones, in fact, have a very specific purpose, particularly when it comes to making baby whales because the reproductive organs of whales attach directly to the pelvic bones and the male pelvic bone anchors the muscles that control movement of the penis. In short, whale pelvic bones give whales more maneuverability while tackling the logistically difficult task of mating in the water.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Just In: Biologica

Whale sex: It's all in the hips

Date: September 8, 2014

Source: University of Southern California

Summary: Whales and dolphins need their hips, it turns out. The bones that we used to believe were vestigial turn out to be important to reproduction. The muscles that control a cetacean's penis -- which has a high degree of mobility -- attach directly to its pelvic bones. As such, it made sense to researchers that the pelvic bones could affect the level of control over the penis that an individual cetacean has, perhaps offering an evolutionary advantage.

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Indeed, the vestigial organs should be abandoned as evidence for evolution since the structure of the argument used is not scientifically valid and the 'vestigial organs' provide no special evidence for the theory of evolution which in essence is an ideology. In truth, the Darwinist mind seeks for flaws in the biological systems in order to argue against design. Hence, this dogmatic stance has led evolutionists to insist on the existence of imaginary flaws and ''useless'' vestigial organs in living systems. However, over and over, these bold claims by evolutionists turned out to be manifestations of ignorance because the allegedly vestigial organs were discovered to be performing very important functions and the whole ''vestigial organ'' argument turned out to be a fallacy. Indeed, all human organs are designed to perfom specific functions, and they are the creation of the All-Wise God who made everything according to a measure. In a word, every single atom in the universe has a definite use. God says: It is the work of Allah, who perfected all things. (The Qur'an 27:88) Indeed, the more we learn about nature,

the more we see the evidence for God's creation. Creationists argue that the conclusion of design comes not from that we do not know, but from the findings of science, whereas Darwinism is an argument from ignorance, or an ''atheism of the gaps.'' Without a doubt, it would seem wise, in view of the history of this subject, not to claim any organs at all as vestigial because the ignorance of scientists about the specific functions of such structures does not prove they have none. It is more than likely that further study will, as in the past, reveal specific functions for the remaining supposedly useless organs. In a word, the argument for vestigial organs is vestigial.

CONCLUSION

I remind myself and I remind every reader as well as every student of knowledge, every seeker of truth and every caller to the way of God to renew the intention of sincere devotion to God Almighty, for the blessings of sincere intention are great. As the saying goes, what matters most is not to be the first to reach a goal, but to be sincere in the pursuit of it because sincerity leads to truth. In fact, intention has a special value in Islam because the value of a person's actions is based upon his intention, motive or objective. In other words, a sound intention is like the prerequisite for the acceptance of deeds by Allah. It was narrated that Abu 'Umamah Al-Bahili said: ''A man came to the Prophet (PBUH) and said: 'what do you think of a man who fights seeking reward and fame - what will he have?' The Messenger of Allah (PBUH) said: 'He will not have anything.' He repeated it three times, and the Prophet (PBUH) said to him: 'He will not have anything.' Then he said: 'Allah does not accept any deed, except that which is purely for Him, and seeking His Face.'''[74] Accordingly, the faithful believers who are not deceived by the trifles of the worldly life are the first to enter Heaven on the Day of Resurrection. The Messenger of God (PBUH) said: Do you know the first (group of people) to enter Paradise from amongst the creation of God. It is the poor and the immigrants (the first converts to Islam who immigrated to Madina) who are the first people in jihad (fighting in the cause of Allah in the first rows of fighters where it is most dangerous), and when they happen to need something they do not ask people for it until they die with their needs still in their hearts i.e. unfulfilled.[75] Verily, God rewards people for their sincerity and piety as He promised in the Qur'an: whosoever does righteous deeds while he is a believer – he will neither fear injustice nor deprivation. (The Qura'n 20:112) And He said: And whoever fears Allah - He will make a way out for him. (The Qur'an 65:112) He further said: And whoever fears Allah - He will make their matters easy for them. (The Qur'an 65:4) Indeed, this is a recurrent promise in the Qur'an. Surely, there is a great reward for abiding in the will of God.

Kindly know that the key to victory over atheists is sincerity, piety and patience. God says: And We made from among them leaders guiding by Our command when they were patient and [when] they were certain of Our signs. (The Qur'an 32:24) The leadership in religion (i.e. imama) can only be achieved through patience and certainty, and it is with these virtues that the

[74]An-Nasa'i Abu-Abdur-Rahman, *Sahih An-Nasa'i* (The Authentic Collection) ḥadīth: 3140.

[75]Ibn Ahmad, *Musnad Al-Imam Ahmad*, ḥadīth: 116096, authentic ḥadīth.

hearts of people will benefit from preaching. In other words, those who take the honourable responsibility of calling to the way of God should have patience. Such patience involves the endurance required in order to fulfil the commands of Allah and the restraint required in order to abstain from His prohibitions as well as the patience required to acquire the needed knowledge and to develop the necessary skills to call to His way. As for certainty it includes solid knowledge, perfect reliance on Allah and firm belief in His promise, glory be to Him. Indeed, we need to stand firm, rely on our God and trust that victory comes from no one but Him.

I advise you to seek His forgiveness whenever you disobey Him. Never tire of seeking his mercy no matter how many times you return to sin, for God never tires of forgiving us. Keep remembering God as the Messenger of Allah (PBUH) said: “The words dearer to Allah are four: ‘How perfect Allah is and all praise is for Allah. None has the right to be worshipped except Allah alone and Allah is great. It does not matter which you say first.” [76] He (PBUH) also said that the remembrance of God gets us forgiveness: ‘‘Indeed, all praise is due to Allah (Al-hamdulillah), glory be to Allah (Subhan Allah), none has the right to be worshipped but Allah (la ilaha illa-Allah), and Allah is the greatest (Allahu Akbar) cause the sins to fall from the worshipper, just as the leaves of this tree fall.[77] He (PBUH) further said: ‘‘whoever is stingy about spending his wealth, fears to fight the enemy, and is terrified of enduring the night should frequently repeat : ‘there is no god worthy of worship but Allah, Glory be to Allah, All praises are due to Allah, and Allah is the greatest.’’’[78] Let us always cleanse ourselves of sins by constantly seeking forgiveness! Finally, May God protect us all, and may He guide the atheists to the path of righteousness. Amen!

[76]Muslim Ibn Hajjaj, *Sahih Muslim*, ḥadīth: 2137.

[77]Muhammad Al-Albani, *SAhih Al-Jam'i*, ḥadīth: 1601.

Muhammad Al-Albani, *As-Sunna As-Sahiha*, vol 6, ḥadīth: 482.

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